OLD!

THE ESSENTIAL GUIDE TO CLASSIC GAMES

retro GAMER

AMSTRAD | COMMODORE | SEGA | NINTENDO | ATARI | SINCLAIR | NEO GEO | SONY | COIN-OP | MOBILE

30 GREATEST WEAPONS EVER

JOHN ROMERO AND OTHERS DISCUSS GAMING'S BEST ARMAMENTS

ALSO INSIDE

BOOTY | COLECOVISION | ENDURO RACER
AUDIOGENIC | JUMPING JACK | DREAMCAST
THE WAY OF THE EXPLODING FIST | H.E.R.O.

ARCADE PERFECT

Discover why the very things that made SNK's console so desirable meant it could never be a success

KEVIN TOMS SPEAKS

THE FOOTBALL MANAGER KING ON HOW IT ALL BEGAN

CODING BACK THE YEARS

THE CLASSIC CODERS THAT STILL MAKE GAMES

FEATURED IN THIS 24-BIT ISSUE

SOLID SNAKE'S FINEST HOUR

YOUR ULTIMATE GUIDE TO HIDEO KOJIMA'S PLAYSTATION STEALTH MASTERPIECE

THE HISTORY OF BROKEN SWORD

CHARLES CECIL RECALLS THE EXCITING ADVENTURES OF GEORGE STOBBART

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ISSUE 146

1 UP HIGH SCORE 2015

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THE RETROBATES

WHAT'S YOUR FAVOURITE NEO-GEO GAME?

DARRAN JONES

For me it's easily *Garou: Mark Of The Wolves*, a stunning 2D fighter with amazing combat.

Expertise:
Juggling a gorgeous wife, two beautiful girls and an award-winning magazine.

Currently playing:
Rare Replay

Favourite game of all time:
Strider

NICK THORPE

I can never resist a game of *King Of Fighters '98* – my team's Terry, Iori and Ryo.

Expertise:
Owning six Master Systems (I sold one)

Currently playing:
Software Star

Favourite game of all time:
Sonic The Hedgehog

PAUL DRURY

Metal Slug is my go-to title if I ever come across a Neo-Geo cab but if I'm with a mate, *Windjammers* is ace – the spirit of *Pong* lives on…

Expertise:
Pixel perfect jumps

Currently playing:
Everyone's Gone To The Rapture

Favourite game of all time:
Sheep In Space

GRAEME MASON

A predictable choice but I'm going for the *Metal Slug* games. Enormous fun.

Expertise:
Adjusting the tape azimuth with a screwdriver

Currently playing:
Resident Evil: Revelations 2

Favourite game of all time:
Resident Evil 4

DAVID CROOKES

The Last Blade was a gorgeous looking fighting game and it had me enthralled for months.

Expertise:
Amstrad, Lynx, adventures, Dizzy, and PlayStation (but is it retro? Debate!)

Currently playing:
Broken Sword 5: The Serpent's Curse

Favourite game of all time:
Broken Sword

JASON KELK

It's tempting to say a *Metal Slug*, but I'll go for *Strikers 1945 Plus*.

Expertise:
Being a homebrew hero

Currently playing:
Star Force

Favourite game of all time:
Io

MARTYN CARROLL

Puzzle Bobble. Not strictly a Neo-Geo original, but the game I've played and enjoyed most on the Neo-Geo cabs that I've come across.

Expertise:
Sinclair stuff

Currently playing:
Trine 2

Favourite game of all time:
Jet Set Willy

STEVE HOLMES

Metal Slug: It's still one of the best and most well-known shooters around, so I'm choosing this to be popular.

Expertise:
Fulton Recovery System

Currently playing:
Metal Gear Solid 5: The Phantom Pain

Favourite game of all time:
The Legend of Zelda: Ocarina Of Time

JON WELLS

Great fun had playing through *Metal Slug* so I'd have to go for that!

Expertise:
Tackling dirty nappies and retro spreads

Currently playing:
Indiana Jones And The Fate Of Atlantis

Favourite game of all time:
Day Of The Tentacle

LOADING...

Arcade perfect. It's a big deal for me. Ever since I discovered arcade games as a very young child I was enchanted by them. I would buy every big arcade conversion that came out on my Amstrad, only to be disappointed when they often failed to come anywhere near my lofty expectations. Arcade quality home conversions became more manageable with the addition of 16-bit systems like the Amiga and Mega Drive and even NEC's plucky PC Engine, but they still couldn't always itch that scratch for me.

I was utterly obsessed with owning a Neo-Geo console. It was *the* arcade experience, because the games were arcade perfect. I drooled over images in *C&VG*, only to realise that the high price point meant I could never possibly afford one on my current wage.

Years later I would join the club thanks to the generous Rotphunge of Neo-Geo.com fame. Before long, though, I realised that the real gems I wanted (*Metal Slug*, *Garou: Mark Of The Wolves* etc.) were beyond my means, so I moved to MVS, which was more affordable. Today, there are far easier ways to enjoy the games thanks to various compilations, but nothing beats the feeling of using the original console.

Enjoy the magazine!

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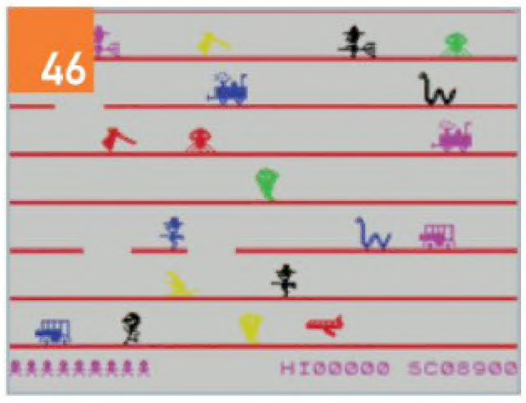

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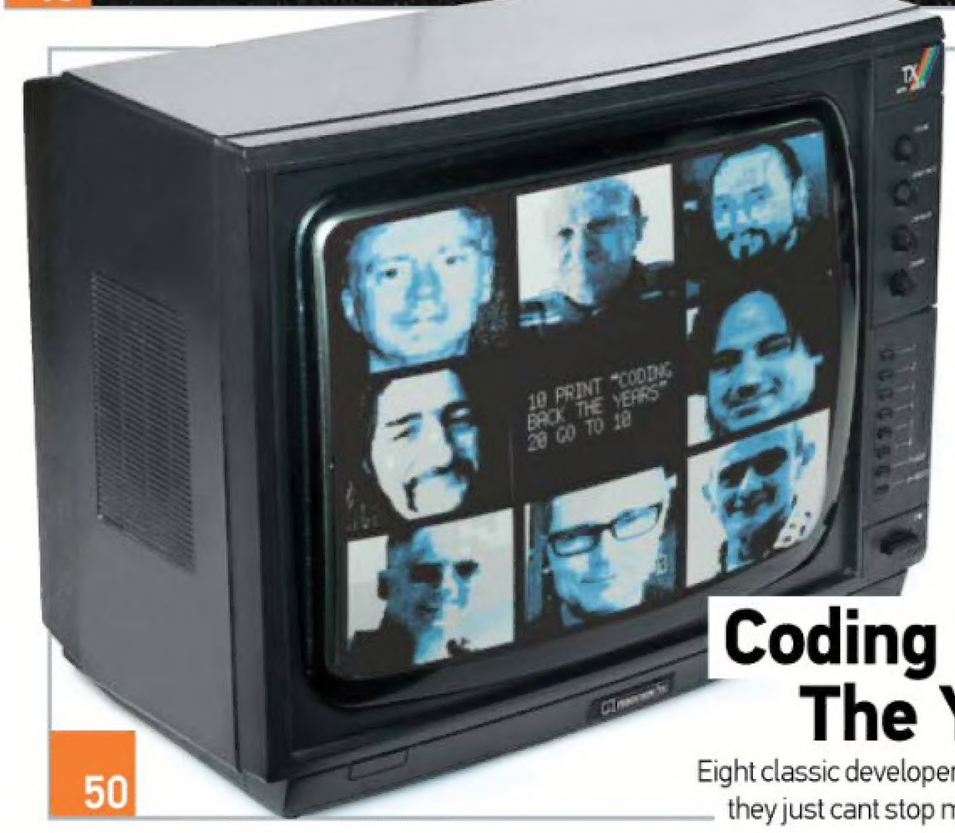
Coding Back The Years
Eight classic developers explain why they just cant stop making games



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ROLLCAGE RESURRECTED

Grip's developers tell us about their spiritual successor to a PlayStation classic

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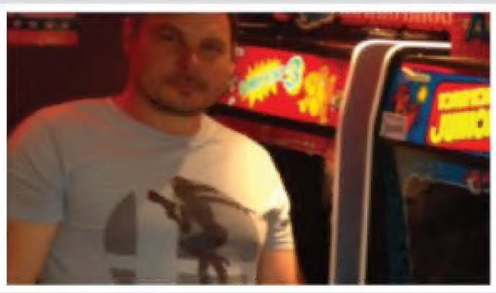


***Rollcage* was immensely popular upon its release in 1999.** Created by Attention to Detail, it was an incredibly slick arcade racer with a futuristic theme and unique vehicles that were double-sided and could race along walls. Its popularity earned it a sequel in 2000, but then the franchise went cold. Now, though, it's back in the form of a spiritual successor that takes all the components of the original game but updates it for a new generation of gamers. Currently on Kickstarter, we were keen to speak to David Perryman, Rob Baker (who worked on the earlier games) and Chris Mallison to find out a little bit more about their new project, *Grip*.

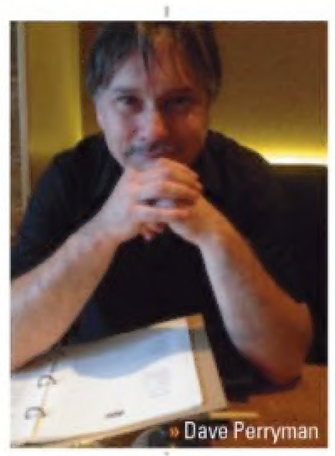
How did this project come together?

DP: Rob Baker and I have been friends from back in the ATD days. We were having a beer one night and reminiscing about how great it was to work on *Rollcage* and *Rollcage Stage II*. I recalled a time during development when he'd got all prophetic and said that it was the best project he was ever likely to work on. We looked into our glasses and nodded agreement. It never occurred to us at that point that we might want to make the spiritual successor.

A few months later Rob was banging on the door with his laptop and demanding I have a look at what he had done with this guy Chris from Canada. I was totally blown away with what they'd managed to come up with and I instantly agreed to lend a hand getting *Grip* made.

15 years have passed since the *Rollcage* games came out, and technology has moved on. How is *Grip* using that extra power?

RB: Two things really, physics and rendering. Of course many things are better now than they were then, but these two in particular stand out as being far in advance. *Rollcage* was developed on the original PlayStation with two 33MHz processors and 3MB of RAM – it was another world. Already the physics and handling in *Grip* make *Rollcage* look like a cartoon by comparison, and it's only going to get better with time.



» Dave Perryman

DP: When we did *Rollcage* we had to write all the tools and editor ourselves. A large proportion of the time was spent wrestling the editor into submission and pushing it beyond its limits. Now all that work is taken care of with *UE4*. I'm really looking forward to getting stuck into building some tracks again.

CM: *UE4* is pretty damn powerful. It allows for a ludicrous amount of polygons, textures and effects on screen at once, and it's blueprint system is just incredible. I'm no coder, but I've built blueprints in *Unreal* that work, and work properly. It's going to be a lot of fun coming up with tracks for *Grip*, I can't wait.

What else will *Grip* do to build on the *Rollcage* template?

RB: We want to please the original fans of *Rollcage*, but we also have to write a new game for a new audience. There's a core of precious gameplay there that we have to be very careful with. We're thinking of enumerable ways to improve and enhance the *Rollcage* recipe. And we're looking to the community for their input.

CM: *Rollcage* is a great inspiration to us. But *Grip* is a brand new IP. It's going to be different in many ways.

For one we'd like the track layouts to further take advantage of the car's design, with interesting ways of navigating. Like having 4-way split tunnels that have you steering onto the wall or ceiling to make it through, or trick jumps that have you going from ground to ceiling or spinning through a tight gap to an alternate route.

How long did it take to create the one-track prototype that's used in your pitch video?

DP: Rob and Chris have been working on that full time, for free, for most of this year. As you can see, from the work so far, they're incredibly talented. I am so looking forward to having the opportunity to show off what they can achieve, if we're lucky enough to reach our Kickstarter goal.

RB: The short answer, longer than we planned. But this was a prototype, and we did all the learning that a prototype is meant for. We took most of this year to develop the game and this particular track, but we believe it will take considerably less time for future tracks now that the learning curve has been summited. We're actually pretty proud that just two devs, one artist and one coder, have produced everything in the game so far. This is testament to the power of *UE4*, and we're very excited about getting a few more devs on-board post-Kickstarter to really get things moving. These are exciting times.

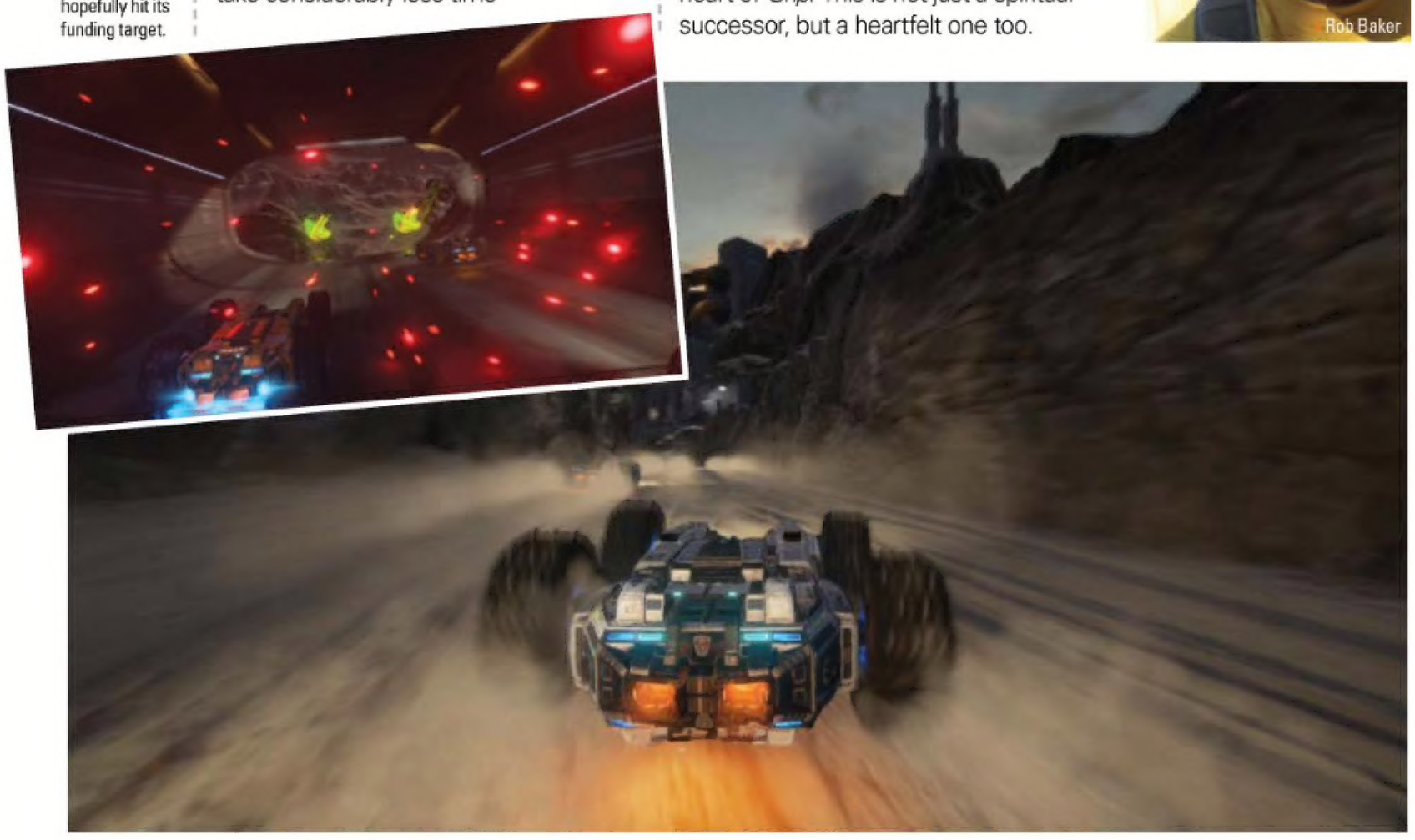
» [PlayStation] Being able to grip to the walls and ceilings of tracks was a big selling point of *Rollcage*.

How important is it to have original *Rollcage* team members on board?

RB: I think it's a big plus. Writing *Rollcage* wasn't easy, and neither will writing *Grip* be. We're having to extend and enhance our own version of *UE4* to be able to do the things that *Grip* needs to do from a physics perspective. Thankfully, Epic now provides the source code for developers like us to be able to do this. *Rollcage*-style physics brings particular challenges. Knowing that our producer also designed some of the best and most creative tracks in *Rollcage* is also no small thing, we've been very lucky in enticing David back into the scene.

DP: Cheers Rob. I think there are a lot of talented people in the World that I have absolutely no doubt could make a decent spiritual successor to *Rollcage*. However, to get that 'feel' just right and to create those 'moments' it needs a deep understanding about what's at the heart of *Grip*. This is not just a spiritual successor, but a heartfelt one too.

Rob Baker



» [PC] *Grip* still has some way to go, but will hopefully hit its funding target.

KICKSTARTER UPDATE

SHENMUE III
$6,333,295 Funded

■ It's a long way from release, but Yu Suzuki's dream is continuing to excite fans. It's had one of the most astonishing Kickstarters ever, with over 90,000 comments and 69,320 loyal backers. Here's hoping that it lives up to expectations.

DRIFT STAGE
$57,720 Funded

■ This gorgeous take on *Ridge Racer* nearly doubled its original $30,000 goal and is due later this year. While we enjoyed playing the PC demo, it's the PlayStation Vita version that we're most excited about.

AMPLITUDE
$844,127 Funded

■ It wasn't looking good for Harmonix, but a late surge saw the game hit funding at the eleventh hour. While the game now features more tracks than was first promised it has been delayed towards the end of the year.

BLOODSTAINED: RITUAL OF THE NIGHT
$5,545,991 Funded

■ Koji Igarashi may have had his Kickstarter record stolen by Yu Suzuki, but we're still supremely confident about this spiritual successor to *Castlevania*. The 2016 release date still feels a long way off but good updates maintain the excitement.

TOEJAM & EARL: BACK IN THE GROOVE
$508,637 Funded

■ Like *Shenmue III*, *ToeJam & Earl* is another game that was unlikely to ever get a sequel outside of Kickstarter. It's happening though and the developers are confident that fans of the series are going to be very happy. We're most likely to see it sometime in early 2016.

YOOKA-LAYLEE
£2,090,104 Funded

■ *Yooka-Laylee*'s pedigree is astonishing so it's no wonder that it smashed its target of £175,000. It's promising to capture everything that made *Banjo-Kazooie* so fun to play and Playtonic is keeping fans happy with updates about the game's progression.

EVIL RETURNS AGAIN

CAPCOM ANNOUNCES RESIDENT EVIL 2 REMAKE

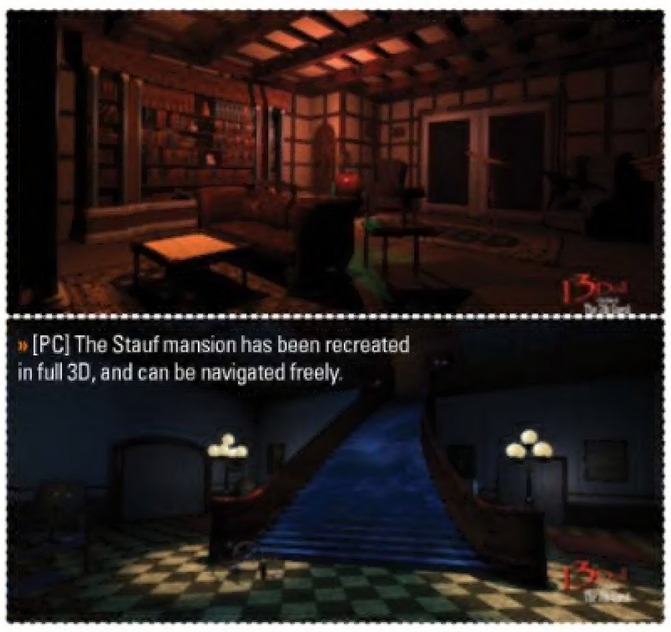
Horror is set to return to the streets of Raccoon City, as Capcom has announced that a remake of the 1998 hit *Resident Evil 2* has gone into production. The developer was spurred into action by the fan project *Resident Evil 2: Reborn*, a remake which had garnered a lot of attention ahead of its release. Capcom R&D1 referenced it in a post on Facebook page, stating that "as the team owns the *RE* brand, we're not certain how we feel about this approach." Two weeks later, the official remake was confirmed and the fan project was cancelled shortly after.

The *Resident Evil 2* followed Leon Scott Kennedy and Claire Redfield as they battled to escape the zombie-infested Raccoon City, and was released for the PlayStation before being converted to N64, Dreamcast, Gamecube and PC. The original game had a troubled development, and was famously restarted after a considerable amount of progress had been made. However, it's regarded as being one of the best games in the series – in fact, **Retro Gamer** readers voted it the number one PlayStation game back in issue 127. Details on the remake are scarce, but we'll keep you updated as it progresses.

» [PlayStation] The urban environments of *Resident Evil 2* differentiated the game from its predecessor.

WELCOME TO THE DOLLHOUSE

FAN-MADE SEQUEL TO THE 7TH GUEST GETS OFFICIAL APPROVAL



» [PC] The Stauf mansion has been recreated in full 3D, and can be navigated freely.

Attic Door Productions has secured a rare coup for a fan group, as it has secured approval from Trilobyte Games to produce a game based on Nineties FMV puzzle classics *The 7th Guest* and *The 11th Hour*. The new game, titled *The 13th Doll*, is based on the gameplay of the original titles and will allow players to explore Henry Stauf's mansion as seen in the original games, the abandoned WonderWorld toy store and an asylum. Despite Trilobyte Games' approval of the project, the game is not to be considered an official sequel and is not published by Trilobyte.

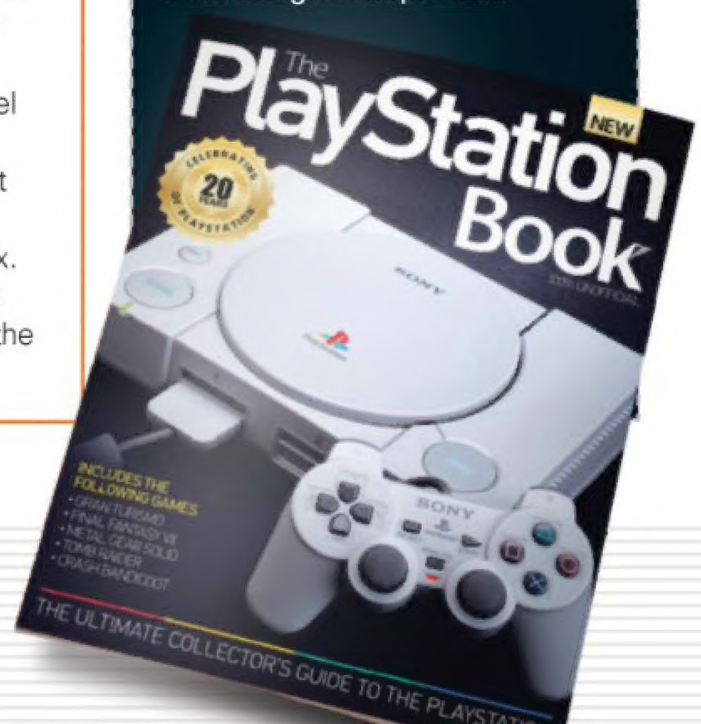
The game has already been approved via Steam Greenlight and has achieved its Kickstarter target of $40,000, meaning that the game will be developed for Windows, Mac and Linux. Further platforms will depend on the final total raised through the current Kickstarter campaign, which was yet to finish by the time we went to press.

SNK PLAYMORE CHANGES HANDS

Ledo Millennium, a subsidiary of the Chinese investment company Leyou Technologies, has acquired majority control of SNK Playmore from former CEO Eikichi Kawasaki. The company purchased his 81.25% share of the company for $63.5 million. Having founded SNK in 1978, Kawasaki left in 2001 to form Playmore shortly before SNK went bankrupt under Aruze's ownership. The new company acquired former SNK properties such as *King Of Fighters* and *Metal Slug* and revived the brand. Ledo Millennium has stated that its goal is to follow Marvel's approach and promote SNK's properties through a variety of media including comics, film and TV.

PLAYSTATION BOOKAZINE!

If you're a fan of Sony's PlayStation, you'll be delighted to learn that we have a brand new bookazine devoted to the best-selling console. **The PlayStation Book** is on sale now and features some of our greatest content from the last ten years. It features many of the biggest franchises, including *WipEout*, *Resident Evil*, *Tekken* and *Metal Gear Solid* and is packed with developer content. **The PlayStation Book** is £9.99 and is available to buy now from imagineshop.co.uk.



Here's my bio... Paul Davies

In 1992 I started out on *Mean Machines Sega* and *Nintendo Magazine System*. In 1995 I became editor of *C&VG*. I led the *C&VG* website from 1998 until Christmas 2000, then I left journalism to be concept design manager at Criterion Games. I returned to journalism in 2002 and from 2005 I've been running my own company, Unlikely Hero.

Play it Loud

My friends knew never to use the doorbell. They'd throw stones at my window instead. The doorbell worked fine, I just wouldn't hear it over my videogames at full blast through the hi-fi.

I paid a small fortune for my Super Famicom S-Video cable, and that was one of the friendlier UK importers. I had no idea what S-Video was, I just wanted audio connecters to hear my new console over the speakers. I already had the Mega Drive hooked up after falling in love with Yuzo Koshiro.

Boy, did that Sony S-SMP deliver the goods! I had *Pilot Wings*, *Super Mario World* and *F-Zero* loud enough to rattle the shelves. The highlight, though, was *Super Ghouls 'N Ghosts*. I'd leave the attract sequence going while I fixed another coffee and an armful of digestives. It was still summer, so I'd throw open the window to impress the neighbours. The girls across the road tried to respond with Chesney Hawkes and Jason Donovan, but I'd already won.

Lately I lose myself in the world inside my headphones, marvelling at the audio design of *Destiny* or smiling at the textured chiptunes of *Axiom Verge*. Ever since I heard *Space Invaders* thudding in my local arcade I've wanted that big sound experience at home. Walking into an arcade in the late-Eighties and early-Nineties was a sight, sound and smell experience of equal measure. You'd hear the bass signature of *Super Monaco GP* before you'd got through the door, blinking through a wall of smoke to stare at this cabinet and wondering if you should feed it coins. You still get a sense of what this was like in what remains of seaside arcades, but the fun of following your ears to a brand new coin-op has long gone.

I probably went overboard listening to *Pokémon* through earbuds, but honestly I love sound effects and theme tunes so much that I always need to hear them up close. I like to hear the hiss of the old sound chips, and used to get a thrill when I heard the wine of RF interference from the Game Boy, or before that my Coleco *Pac-Man Mini Arcade*. Heck, even the click of a *Game & Watch* was exciting.

I was probably one of very few that felt ho-hum about the advent of CD-quality sound from the 3DO, Saturn and PlayStation era. If I wanted to hear a CD I'd listen to Leftfield. My fascination then, and still today is with the synthesised noises that typically comprise a videogame soundtrack. It's why, even though I've downloaded a near-perfect version of *Mark Of The Wolves* from Xbox Live, I still long for the days when I owned the physical chips.

There are forum threads on how to get the best picture from retro gear on modern TVs. This obsession with visual clarity is wonderful. But if you've yet to hear games of yesteryear amplified to unhealthy volumes, it's high time that you did. Don't skimp on the expense. I promise you, it'll be like opening a door to another world. *

What do you think?

Do you agree with Paul's thoughts? Contact us at:

RetroGamerUK @RetroGamer_Mag retrogamer@imagine-publishing.co.uk www.retrogamer.net/forum

a moment with...

Maya Pixelskaya

We caught up with the versatile artist to learn about her history with retro games...

Tell us a little bit about your gaming history – what games and systems did you enjoy while growing up?
I started playing on an Atari ST; there's where I discovered games like *Rampage* and Al Lowe's educational Disney games. I then proceeded to play on NES and Game Boy, until I got a 486 PC, where I started playing all the classics: *Monkey Island, Maniac Mansion, Day Of The Tentacle, Broken Sword...* and Al Lowe's adult games, of course.

I also frequented arcades with other kids; there's where I fell in love with *Street Fighter, Sunset Riders, Metal Slug...* I was quite the tomboy.

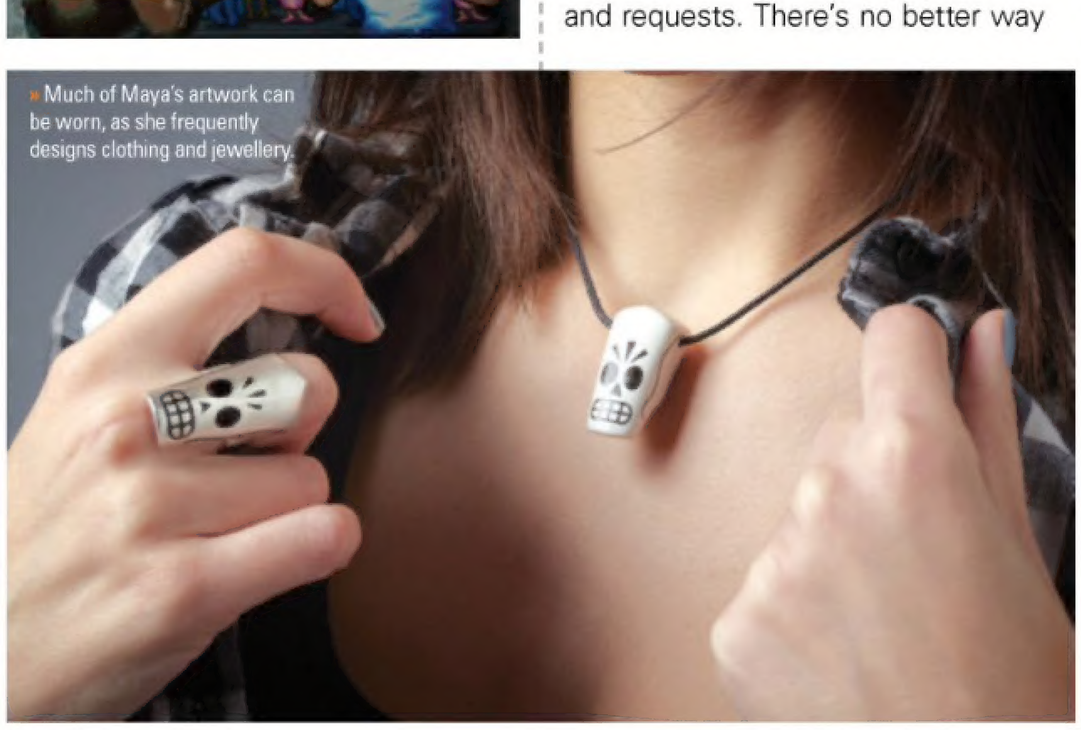
How did you get started making artwork based on retro games?
It was just a natural reaction to the lack of merchandise of the games I liked; I wanted to be able to wear, hang on my wall and/or gift things related to my favourite characters just like people could wear a T-shirt of their favourite band. It started off as something just for myself or for my friends; the internet did the rest.

I also thought it could be fun and absurd to take videogames out of context, and reproduce those pixels I loved so much using my brushes. Fast forward to years later, and there's me finishing a *Street Fighter II* triptych that took 800 hours of meticulous work. And I'm planning the next...

» Maya's a big fan of classic adventure games, as this *Full Throttle* jacket shows.

» This hand-painted *Street Fighter II* triptych took an astonishing 800 hours to complete!

Your art crosses a wide range of media, including copper etchings, clothing design and even jewellery. How did you pick up such a wide range of techniques?
Together with videogames, art was my other passion growing up. I have worked as an illustrator for many years; I love experimenting with new techniques, and I just can't help mixing the things I like. Also, learning new stuff is always super fun! So I try to find people who know how to do something that I don't, and then I drive them crazy with my questions and requests. There's no better way to learn a skill than failing at it; I actually have a box with 'miscarriages' written over it. That's where I put all the failed attempts that you'll never see on my Instagram (I tweet them sometimes, though; my deformed Manny Calavera is hilarious).



» Much of Maya's artwork can be worn, as she frequently designs clothing and jewellery.

Have you ever had your work noticed by the developers? What did they think about it?
I was lucky enough for my work to be noticed by Tim Schafer and Ron Gilbert. Tim invited me to visit Double Fine in San Francisco, which was amazing, and Ron commissioned a tie from me. They're not only my childhood heroes, I admire and follow their current work, so I'm very honoured and thankful!

Other developers have contacted me also; they have all been so amazing and supportive!

So what's your favourite piece of work you've done so far?
I once painted a scene from *Street Fighter II* on my thumb nail; it took me an entire day. It is now lost, of course; there was obviously no financial gain, and only the photos remain. To me that's what best represents how much I love doing what I do.

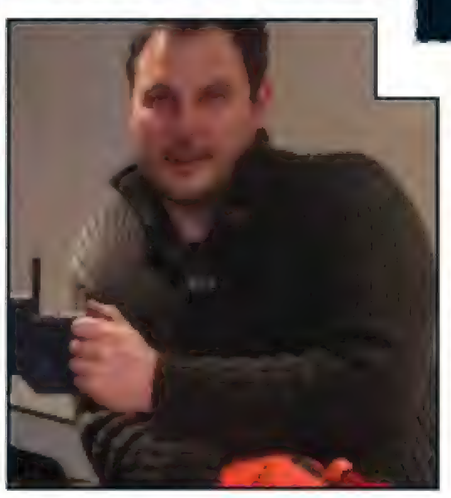
» A print of the copper etching that landed Maya her scholarship.

I also have a soft spot for my *Monkey Island* copper etchings. I took a short introductory course on etching because I had always wanted to learn about it, and then I reproduced Steve Purcell's cover for *Monkey Island 2* as a self-imposed challenge. That piece of work landed me an amazing scholarship, and now I'm a qualified etcher. When I look at it now, I see pride in LeChuck's bony face.

Where can our readers keep up to date with what you're doing?
I'm very active on social media! You can follow me on Facebook (Maya Pixelskaya - RetroGame Art), Twitter and/or Instagram (@pixelskaya). I'm going to apologise in advance for the abundance of both dinosaurs and nonsense in my posts. ✱

Collector's corner

Readers take us through the retro keyhole



BIO

NAME: Alex Crowley

ESTIMATED VALUE: Unknown

FAVOURITE CONSOLE: SNES

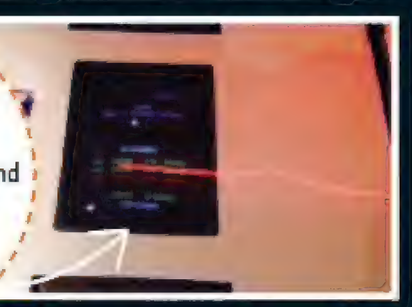
FAVOURITE GAME: *Sheriff* (arcade)

Alex, who is the proud owner of a rather special arcade game – but more on that shortly – first started collecting in the Eighties. "Back then I enjoyed spending my hard-earned paper round money on games such as *Chuckie Egg* and *Scuba Dive*," he begins. But it wasn't until he acquired a SNES that Alex began collecting, and now has over 200 games for the console. It is with Nintendo's arcade games, however, where he focuses his collecting. "My ultimate objective is to own all of Nintendo's in-house early arcade games," Alex tells us, "although I'll soon need a bigger games room!" Naturally he's also a big fan of arcade gaming in general. "I remember queueing up at my local swimming baths to play *Space Invaders*, so I feel I was there right at the start of it."

When it comes to his jewel in the crown, Alex owns not just one, but two cabinets of the extremely rare Nintendo game, *Sheriff*. The game is famous for two reasons: first of all it's one of the the first known original videogames by Nintendo, and secondly as it's the first game from Shigeru Miyamoto. "I used to play it a lot back in the Seventies and remember it well with its deep half-mirror image that always felt like a magic trick." After five years of searching, Alex finally discovered one for sale in Luxembourg, but hit a snag: the owner was understandably reluctant to ship the heavy cabinet. "He said if you really want it, come and get it! So I travelled 900 miles to get it and it's one of the heaviest cabinets I've lifted!"

In addition to *Sheriff*, Alex also boasts *Donkey Kong*, *Donkey Kong Junior*, *Donkey Kong 3*, *Popeye*, *Space Firebird*, *Space Fever* and *Space Launcher* in his collection. Surely it's going to be difficult completing the collection? "Yes, it would be, but space is a problem as these machines are so big. But I am quite happy with what I've got."

Our thanks to Alex for his time. Check out his Youtube channel Nintendo Arcade for videos of his collection: youtu.be/1Hd3ukbx4q8.



BACK TO THE NINETIES

» [PlayStation] *R-Types* was an impressive conversion, containing *R-Type* and it's rock hard sequel.

THE LATEST NEWS FROM SEPTEMBER 1998

SEPTEMBER 1998 – EA gets caught by the fuzz, Area 51 probed again by Atari, Operation Tiger replaces the Wolf while King Of Fighters and Tekken 3 hit you right where it hurts. Richard Burton prepares his gonad drop super kick…

Electronic Arts newest addition to its *Need For Speed* series popped up this month in the form of *Need For Speed III: Hot Pursuit* on PC. The 'Hot Pursuit' in question is a police chase introduced as a playable option. There's the standard racing modes available; full or split-screen races and various tournaments such as the Knockout tournament which sees the last placed car in each race eliminated.

The new category of racing included is the option to be chased down by or become the police. Attempt to catch your opponents by pure speed or you could utilise roadblocks and deploy stingers to disable chased cars.

There's a suitably varied selection of tracks available from the serene mountains to dust bowl deserts with lovely detailed graphics throughout. *Need For Speed III* was very enjoyable and getting the option to play as the rozzers was refreshing.

Arcades were spoilt rotten with a number of new coin-op releases out this month. Oddly most had hint of zombie and/or lightgun action.

Atari released *Area 51: Site 4*, a sequel to its 1995 original with *Site 4* picking up where the original left off. This first-person lightgun shooter saw you reprise your role as a member of STAAR, the Strategic Tactical Advanced Alien Response team, who must stop an alien invasion and the zombies that they've created that are swarming the secret base in Area 51.

It's a typical first-person rail shooter stuff but with nicely honed graphics and a good pace. With 18 different training missions, a testing field exercise and the main game, there was plenty of variation to hold your attention in what was a good solid coin-op offering.

Taito released the fourth and final game in its *Operation* series. It began way back in 1987 with *Operation Wolf*, followed a year later by *Operation Thunderbolt* and updated in 1994 with *Operation Wolf 3*. The last instalment, entitled *Operation Tiger*, is more of the same lightgun-based shooter action as you run through ammo-strewn battlefields to liberate your comrades in either one player mode or in a two player co-operative game.

Taito also had another coin-op on show this month with *Chaos Heat*. It was a third-person 3D shooter based in a biotechnology laboratory where giant rats, zombies and mutated spiders dwell. You can play as one of three characters who are sent in to investigate what is going on in the labs.

You must battle through the various labs, finding key cards to access the next set of rooms and destroy the freakish inhabitants to make your escape but not before the obligatory over-sized mutant boss fight at the end of the stage.

» [Arcade] Atari's new coin-op *Area 51: Site 4* consisted of blasting mutant zombie nastiness.

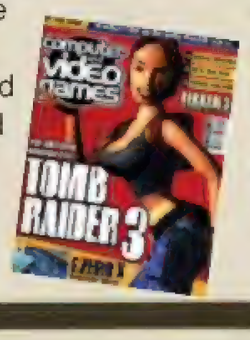
» [Arcade] Save your comrades with blasting a plenty in Taito's *Operation Tiger* with more frenzied lightgun action.

» [PC] If the urge to play a rozzer and chase down cars appealed to you, then the new *Need For Speed* would be most welcome. You're nicked!

THIS MONTH IN...

COMPUTER & VIDEOGAMES

C&VG chatted with Richie Morten, level designer on the forthcoming *Tomb Raider 3*. He explained why the use of triangular polygons were preferable over square polygons as they allowed for smooth surfaces and a varied level design. Well, we all learned something today.



NEW ATARI USER

Issue 85 of the long-running independent magazine for classic Atari systems was to be the last. Editor Les Ellingham stated in the magazine's foreword that he was to end the magazine but insisted that there would be six more issues before it stopped. There, unfortunately, wasn't and issue 85 ended its 16 year run.

GAME PRO

This issue featured the Intensor, a cunning chair/speaker peripheral-thing that plugged into any console with audio outputs. With the enhancement of booming sound, the immersive element of gaming was highlighted although, essentially, you were sitting on a weird vibrating subwoofer.

Chaos Heat was certainly a fun title which played a little like *Resident Evil*. Labelled as having survival horror elements, in truth there wasn't really anything of the kind.

Lastly there was *Evil Night*, another lightgun zombie shoot-'em-up, this time by Konami. The backstory was that a girl has been kidnapped and taken to a haunted house. Three police officers go to the house and attempt to stage a rescue.

Evil Night was a first-person rail shooter and played very similar in style to *The House Of The Dead*. A nice touch was the co-operative three-player game which saw player two holding a shot gun for a wider spray of ammo while flanked by players one and three who have powerful handguns. *Evil Night* played well but offered nothing exciting to the burgeoning horror genre.

Back in the world of home consoles, there was kick your face off action with the newly-released *Tekken 3* available on PlayStation. While the fighting remained similar to the earlier *Tekken* games, the speed and fluidity of the action was faster and the graphics had been substantially improved.

One advancement over earlier versions was the ability to sidestep and move from foreground to background giving more depth of play. Add to this 15 all new characters and a handful of fun mini-games and *Tekken 3* was good news all round. It had variety, longevity, playability and was executed superbly. The downside? There wasn't one, it was simply perfect.

Another exemplary beat-'em-up out this month was *The King Of Fighters '98: The Slugfest* on the Neo Geo AES format, a port from the coin-op version released two months earlier. Although it was the fifth game in the impressive series, the people at SNK took a break from the ongoing *KOF* plotline.

In *KOF '98* the old guard, past masters and favourite characters are all clumped together for one almighty game of fisticuffs. With 38 characters to choose from, variety is something *KOF '98* certainly didn't lack.

Gameplay is virtually identical to previous games with single play/team play and extra/advanced modes. To see the return of some of the older characters from earlier games (yes, even the dead ones) made *KOF '98* a delicious fighting game and arguably the best in the series, up to this point.

Another piece of gaming brilliance, was *R-Types* for the PlayStation. Finally available in Europe, *R-Types* was a compilation of Irem's fantastic shoot-'em-ups *R-Type* and *R-Type 2*. However, these were pixel perfect conversions of the coin-ops rather than cobbled together ports and, as such, both games play like a dream. The difficulty level of these notoriously testing games could be altered and there are also infinite continues. Your position is also automatically saved at the beginning of each new level which ultimately makes the usual impossibility of finishing an *R-Type* game a bit more possible. ✱

SEPTEMBER WORLD NEWS

4 September saw the first episode of a new game show air on ITV. *Who Wants To Be A Millionaire?* hosted by Chris Tarrant which gave contestants the opportunity to answer 15 multiple choice questions to win £1 million.

On the same day Google was formed by PhD students Larry Page and Sergey Brin. The American technology company is most famous for its search engine. Who wants to be a multi-billionaire?

12 September saw the world premiere of the movie *Ronin*. Starring Robert De Niro and Jean Reno as part of a team of special operatives who band together to steal a mysterious and heavily guarded suitcase. Good reviews followed with critics particularly liking the realistic car chases.

14 September saw the first episode of *The Royle Family*, a sitcom starring Ricky Tomlinson and Sue Johnston as Jim and Barbara Royle. During its 17 year life there has only been 25 episodes, including Christmas specials.

18 September saw the release of the movie *Rush Hour* starring Jackie Chan and Chris Tucker in this buddy cop action comedy where two cops from different cultures team-up to rescue a kidnapped girl.

21 September saw the death of the American sprinter Florence Griffith Joyner. Arguably the greatest female sprinter of all time, she still holds the 100m and 200m world records. Tragically she died in her sleep having suffocated during an epileptic seizure. She was aged 38.

CHARTS

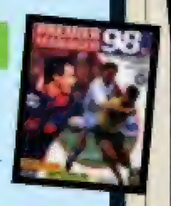
SEPTEMBER 1998

NINTENDO 64

1. Banjo-Kazooie (Nintendo)
2. FIFA World Cup 98 (Electronic Arts)
3. GoldenEye 007 (Nintendo)
4. Cruis'n World (Nintendo)
5. Diddy Kong Racing (Nintendo)

PLAYSTATION

1. Premier Manager 98 (Gremlin)
2. Colin McRae Rally (Codemasters)
3. Gran Turismo (Sony)
4. Spice World (Sony)
5. FIFA World Cup 98 (Electronic Arts)



PC

1. Premier Manager 98 (Gremlin)
2. Commandos: Behind Enemy Lines (Eidos)
3. Cannon Fodder (Sold Out)
4. Titanic: Adventure Out Of Time (Europress)
5. Championship Manager 97/98 (Eidos)

MUSIC

1. Millennium (Robbie Williams)
2. No Matter What (Boyzone)
3. Bootie Call (All Saints)
4. Sex On The Beach (T-Spoon)
5. I Want You Back (Melanie B ft. Missy Elliott)

» [Neo Geo AES] Subtitled *The Slugfest, The King of The Fighters '98* brought together the best characters from the previous games.

retro GAMER.net
READER'S REVIVAL

Darxide

"THAT'S YOUR THING, RIGHT? FACING THE VOID?"

#92

» FRONTIER DEVELOPMENTS » 32X » 1995

One of the last games to be released for the 32X was a PAL-only shoot-'em-up called *Darxide*. Retrospectively for me, the sad little Segaphile, *Darxide*'s release and total lack of sales marked the end of the era. The *Sonic* boom was over. But with people paying triple figures for a 32X (chuckles), the question must be asked – is it any good?

It's alright, actually. Imagine if *Asteroids* was made with mid-Nineties polygons. Then have your imaginary game mate with *Star Fox*. Throw in a few enemies from *Xevious*. Got a good mental image now? Good. That's *Darxide*.

There are two things in videogames I like less than inverted controls: QTEs and online Xbox gamers. It's okay for joysticks on big dedicated cabinets, but when it's on a game meant for a D-pad, like *Darxide*, it just seems pointless and irritating.

Something else to complain about is that the asteroids don't really pose much of a threat to you. They're just drifting along most of the time. It makes me wonder why I should destroy them in the first place. So, unlike the menacing meteors that bedevilled you in *Asteroids*, shooting *Darxide* space debris feels a little cruel. I mean it isn't doing any harm, and if it does you won't actually notice until it flashes up on screen, because they seem to have skipped including a hit animation.

Other than these faults, and the feeling that the game is running a little too fast, *Darxide* isn't so bad. I'd advise you play *Shadow Squadron* first but there's no need to avoid this collector's item. There's no need to pay nearly a grand for it either, but that should go without saying. *Should.*

SCOTT REED

ARCADE PERFECT

Its sheer power may have hindered its success, but SNK's console remains highly desirable. Damien McFerran discovers why...

Some retro systems are remembered fondly by the players of today because they offer vibrant and engaging gameplay experiences that continue to resonate throughout the years, but in the case of SNK's Neo-Geo system – which turns 25 this year – the opposite is often true. It is famous not because gamers owned and savoured it, but because it was always so tantalisingly out of reach. Due to the high cost of the console and its games, to be a Neo-Geo owner in the early-Nineties was to be part of a very exclusive club, and unfortunately for the vast majority of those teenage players who gazed longingly at screenshots of SNK's latest games in magazines of the era, membership was something they could only dream of. "The Neo-Geo was the console that few people I knew owned and was mostly only ever seen briefly in the pages of videogame magazines or in an arcade at the seaside," says Jonathan Town, a former Nintendo UK community manager and fully-committed Neo-Geo devotee. "It was a living myth, but without the internet or YouTube to clarify any childish claims, we never knew what was true and what was not. I think here in the UK, because the Neo-Geo never really had a proper release, it was largely an unknown entity. We all wanted one."

The reason the Neo-Geo AES (short for Advanced Entertainment System) cost so much was because it was effectively an arcade machine in console clothing. The idea was simple: instead of having to replace the entire arcade board inside a cabinet, amusement centre owners could simply invest in a Neo-Geo cabinet which contained the hardware required to run the games and swap out the bulky cartridge to keep things fresh. The arcade version of the Neo-Geo – known as Multi Video System, or MVS for short – used massive, hardback-sized cartridges which could be replaced quickly, easily and – compared typical arcade boards – relatively cheaply. In comparison, standard JAMMA arcade boards were large, delicate and fiddly to replace. While AES and MVS carts weren't interchangeable, the software on them was identical. When SNK said 'arcade perfect', it really meant it – and the system's arcade pedigree would make the AES so desirable in the eyes of players.

"In the Nineties, arcades were still pretty common in the United States," explains hardcore Neo-Geo collector Jeremy Forrest. "Neo-Geo was literally everywhere. I would go to the grocery store with my parents and *Ninja Combat* was there to greet me. When I would sneak deeper into town than I was supposed to, crossing dangerous intersections against the will of my parents, it was because *League Bowling* and *Samurai Shodown II* were there at the bowling alley, waiting for me." To the kids of the Nineties, the sheer notion that it was possible to purchase a home console that was capable of replicating the same performance of a arcade machine was absolutely mind-boggling."

That mind-boggling performance came at a price, though - it was simply too expensive for the average consumer. The Gold System (two controllers and a choice of *Nam-1975* or *Baseball Stars Professional*) launched at $6499 in the States in 1990. The SNES in comparison launched a year later at $199. A Silver System package did arrive without a second controller or game for $399, but it was still an expensive proposition, particularly when you consider that the games themselves were around four times as much as their competitors'. SNK's premium price, for an admittedly premium console ultimately meant it could never be a huge commercial success.

Another issue that affected SNK's success was the machine's software library. Without the support of coin-op heavyweights such as Capcom, Konami and Namco, SNK set about creating its own franchises which would attempt to cover all the major genres, but it would be the one-on-one fighting genre where it would arguably find its most success, although even this wasn't without drawbacks. "The first SNK game that stuck in my head was *Samurai Shodown II*, because it was installed at my local diner, so I played that a lot," says James Mielke, a games journalist-turned-developer who has enjoyed tenures at Q-Games, Q Entertainment and now resides at Square Enix subsidiary Shinra Technologies – as well as running Japanese indie development event BitSummit. "Later, if memory serves, SNK popped on to my radar once again when my local pizza place in NYC's East Village installed a World Heroes cabinet next to *Street Fighter II*." In terms of timing, it was just perfect. One-on-one fighters had become the genre of choice off the back of *Street Fighter II*'s success, and SNK capitalised on this superbly.

Even today many consider the Neo-Geo to be a one-trick pony, and it is to a point due to its overwhelming, but diverse range of fighting games. It lacks the killer RPGs, platformer and racers that were so popular on its rivals, but other genres are well represented thanks to the likes of *Blazing Star*, *Metal Slug*, *Cyber-Lip*, *Magical Drop*, *Pulstar*, *Shock Troopers*, *Windjammers* and *Twinkle Star Sprites*.

Did You Know?

While the Neo-Geo was marketed as a 24-bit system to differentiate it from its 16-bit rivals, it was actually sported a 16-bit 68000-chipset twinned with an 8-bit Z80 coprocessor.

Franchise Starter

The Neo-Geo kicked off a lot of popular games series

Console war

Key Stats for the Neo Geo, SNES and Mega Drive

Did You Know?

■ Official software support for the machine ran from 1990 until 2004, but unofficial, unlicensed games are still being produced for the console.

NEO-GEO

★ **CPU:** Motorola 68000 (12 MHz), Zilog Z80 coprocessor (4 MHz)
RAM: 64KB SRAM (main), 84KB SRAM (video)
★ **COLOUR PALLETTE:** 65,536
★ **COLOURS ON-SCREEN:** 4096
★ **SPRITES ON-SCREEN:** 380
★ **YEARS ACTIVE:** 1990-2004
UNITS SOLD: 980,000 (as of 1997)
PRICE: $649

SNES

CPU: Custom 65c816 (3.58 MHz)
RAM: 128 KB (main), 64 KB (video) ★
COLOUR PALLETTE: 32,768
COLOURS ON-SCREEN: 256
SPRITES ON-SCREEN: 128
YEARS ACTIVE: 1990-1999
UNITS SOLD: 49 million ★
PRICE: $199

MEGA DRIVE

CPU: Motorola 68000 (7.6 MHz), Zilog Z80 sub-processor
RAM: 64 KB (main), 64 KB (Video)
COLOUR PALLETTE: 512
COLOURS ON-SCREEN: 64
SPRITES ON-SCREEN: 80
YEARS ACTIVE: 1988-1997
UNITS SOLD: 40 million (estimated)
PRICE: $189 ★

★ **HIGHEST STATISTICS**

» SNK left owners with no doubt that its new console was, "A quantum leap forward in video entertainment."

While the Neo-Geo's library is somewhat small, it's packed with classics – making the act of picking out one title which defines the system near-impossible. "You might as well ask a mother which child is her favourite!" Jeremy laughs. "If I had to pick one it would have to be *The Last Blade*. All the characters are appealing and fun to master. The animation is smooth, and the controls are spot-on. I also absolutely love the deflection system, it makes the game so much more tactical. To me, *The Last Blade* is one of the few games of the era that transcend just being a game, and experimented being a work of art. In a time when games were just trying to be profitable, *The Last Blade* was trying to be an interactive, masterful work of art." Indeed, this seminal fighting title is a shining example of the level of perfection SNK had managed to achieve within the genre, and, unsurprisingly, remains in high demand among collectors. For James, another famous Neo-Geo fighter is close to his heart. "*Garou: Mark Of The Wolves* is still one of the best 2D fighting games, and it really stood out from the rest of the *Fatal Fury* series," he says. "Its primary competition at the time, *Street Fighter III*, got a lot more attention, but I think *Garou* is the better game."

Did You Know?

■ The AES home system was initially intended for commercial locations such as hotels and bars, but consumer reaction convinced SNK to produce a domestic version.

While other systems have come and gone, the Neo-Geo continues to make its presence felt in collector's circles, generating intense interest among hardcore players and videogame fans in general. "I reckon this is because it was one of the purest, most hardcore gaming systems around," says James. "It was all about the games. Also, the underdog always tends to hold a higher reputation, and it stuck around for a long time. The system was loaded with classic games, and the controllers and arcade sticks were iconic." A huge factor in this prolonged fame is down to the sheer desirability of the console, but there's more to it than that. "A lot of Neo-Geo fans would tell you Neo-Geo is special to them as it represents something they could not obtain as a child," says Jeremy. "In a way I can understand this because I remember begging my parents to get me one, and the feeling I received after obtaining one as an adult. I feel the console is still beloved today because the Neo-Geo has such a solid library of games. If the console consisted solely of titles like *3 Count Bout* and *Legend Of Success Joe* we wouldn't be having this discussion."

Inside the Neo-Geo A look at the guts that powered SNK's console

GRAPHICS PROCESSING UNIT
■ This custom chipset gives the Neo-Geo a real edge over its 16-bit rivals, allowing the console to scale and manipulate sprites smoothly. 380 sprites can be rendered simultaneously.

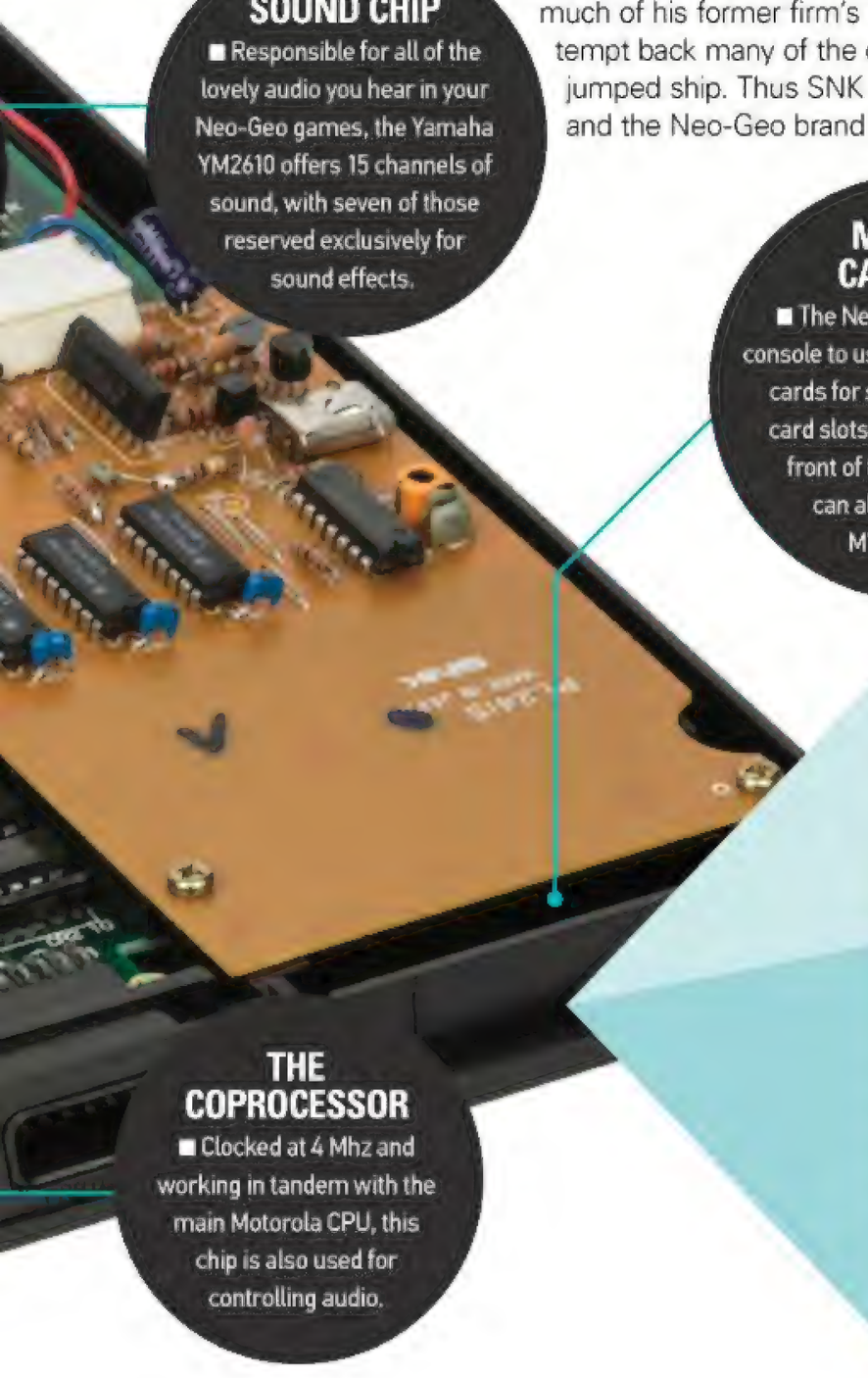
THE CPU
■ The brain of the Neo-Geo is a Motorola 68000, although some units had equivalent chips produced by Toshiba or Hitachi. The CPU is clocked at 12 MHz.

> **We had to use the original Neo-Geo code – we weren't allowed to re-code the games**
>
> Jim Philpot

As the Nineties wore on, SNK's console began to struggle, unable to compete with its cheaper peers and the advent of 3D gaming that became the standard thanks to the PlayStation. The platform continued to receive solid software support, though. However, 2001 brought with it financial problems. Following SNK's purchase by pachinko machine maker Aruze, SNK founder Eikichi Kawasaki left the company to form Playmore, and when SNK slipped into bankruptcy that October, Kawasaki would purchase much of his former firm's intellectual rights and tempt back many of the developers who had since jumped ship. Thus SNK Playmore was formed, and the Neo-Geo brand was revived once more.

Part of SNK Playmore's strategy during this period was to ensure a steady stream of ports to other systems. It made sense as the consoles of the period – the PlayStation 2, Xbox and later Wii – were all capable of hosting faithful replications of the big games, and it allowed fans who couldn't afford the AES hardware the chance to enjoy SNK's library at a lower cost. In Europe, these titles were published by Ignition Entertainment. Former Ignition employee Jim Philpot recalls that SNK Playmore was quite stringent when it came to quality, although some ports, particularly the PS2 compilations, were far from perfect. "We had to use the original Neo-Geo code – we weren't allowed to re-code the games so essentially every release was a Neo-Geo emulator. All we ever got as our starting point was the Neo-Geo assembler code. Sound effects and artwork were ripped directly from this data. It's the only option we had, but it did mean the games were perfect replicas. It's not well known that it was the work of one programmer – one of the best I've ever worked with then, or since, Ade Scotney. Ade has worked in the industry from the very beginning and has quite an impressive back catalogue, but he's always preferred a low profile. Without him the games would never have made it to console – it's as simple as that."

» Here's another view of the memory card. It's an incredibly slim piece of equipment and it's quite delicate.



SOUND CHIP
■ Responsible for all of the lovely audio you hear in your Neo-Geo games, the Yamaha YM2610 offers 15 channels of sound, with seven of those reserved exclusively for sound effects.

MEMORY CARD SLOT
■ The Neo-Geo was the first console to use removable memory cards for save game data. The card slots into this port on the front of the machine and it can also be used with MVS cabinets.

THE COPROCESSOR
■ Clocked at 4 Mhz and working in tandem with the main Motorola CPU, this chip is also used for controlling audio.

Blazing a trail

How SNK set a trend with its Memory Card

Modern machines may have done away with the archaic concept of memory cards thanks to their roomy internal hard drives, but when CD systems first arrived in the Nineties such items became utterly essential for saving in-game progress. However, despite what you may assume they didn't actually originate with the likes of Sony's PlayStation and Sega's Saturn – SNK beat both to the punch by almost half a decade. The memory card which shipped alongside the Neo-Geo had a slightly different aim to the one which would become such an intrinsic part of our lives when the PlayStation arrived – it was designed to allow arcade players to carry over their progress on the home console, and vice versa. It could hold a whopping two kilobytes of data. A built-in lithium battery keeps the data alive, but replacing it is tricky.

Ten Great Games (That weren't beat-'em-ups)

LAST RESORT 1992

■ An early shooter release for SNK, but arguably one of its finest. The gameplay may not offer anything particularly original but it's addictive and compelling, helped in no small part by the unique visuals which possess a grim and foreboding atmosphere. One of the more underappreciated gems in the Neo-Geo library, *Last Resort* is well worth a look for shooter fans.

PUZZLE BOBBLE 1994

■ A spin-off of Taito's famous *Bubble Bobble* franchise was renamed *Bust-A-Move* in some regions and went on to become a considerable hit on consoles like the PlayStation and Saturn. The match three bubble-popping gameplay means instant playability, and the concept has been cloned many times over the past few decades. A 1999 Neo-Geo sequel is also available.

PULSTAR 1995

■ The Neo-Geo never got a port of *R-Type*, but then it didn't really need one as Aicom's 1995 shooter *Pulstar* does a pretty fine impression of Irem's seminal arcade classic. Pre-rendered sprites give the whole experience a very clean and shiny appearance, while the intense and challenging gameplay make this a real test for fans of the shoot-'em-up genre.

TWINKLE STAR SPRITES 1996

■ One of the most unique titles on the Neo-Geo, this puzzle/shooter hybrid is also one of the system's premier two-player experiences. The screen is divided in two with each player taking a side, and shooting down waves of enemies allows you to plant them on your rival's screen – the last player standing is the winner.

NEO TURF MASTERS 1996

■ Proof that the Neo-Geo was capable of handling effective sports simulations, *Neo Turf Masters* is an arcade experience which offers short-burst challenges rather than a lengthy career, but is all the better for it. Golf is often derided as being a pedestrian sport, but Nazca's take is fast-paced and thrilling, making this one of the jewels in the Neo-Geo's crown.

» The controllers were excellent, feeling like proper arcade sticks. They were obviously expensive, too.

▶ Ignition quickly found that these ports became a key revenue stream. "It's likely that had we not have had those titles, Ignition wouldn't have lasted as long as it did," says Jim. "It was the SNK games that provided the revenue that kept the development side fuelled. SNK were very hands-off in the end. We had such a smooth operation going that all they used to do in the end was send us source code and then start phoning up chasing royalties!"

While Ignition's ports found a largely receptive audience, dedicated fans remain adamant that the only authentic way to experience the Neo-Geo library is on the original hardware. As is the case with any classic system, the Neo-Geo and its software are in constant demand in today's second-hand market, but seeking out SNK's platform requires a level of financial dedication that is arguably unmatched in the realm of videogaming. "In the world of Neo-Geo AES collecting, most of the older games are the cheapest while newer games being more expensive, roughly speaking," explains Jonathan. "Although that's not always the case, you'll find that many of the launch window titles can be picked up for less than £100 – however, move along a few years and you'll quickly find games shooting up over the £200 price point. Some of the later entries, such as the amazing *Garou: Mark Of The Wolves* will easily set you back between £500 to £800 and most people are aware of *Metal Slug*'s ridiculous £1,000+ going rate. If you're tight on budget but just want to play, the Neo-Geo CD system is a good choice as the prices are reasonable, just be aware that not all the games made it to CD format and some of the loading times are really bad. Finally, if you're really not too fussed about the presentation of the packaging, get yourself either a Supergun or a cheap arcade cabinet and an MVS system; MVS games are cheap as chips. *Metal Slug* can be found for about £25, for example."

While Jonathan is a cautious advocate of the AES route, Jeremy feels that anyone looking to begin a Neo-Geo collection should totally ignore the home variant and instead opt for the arcade MVS format. "Home cartridge games are way too expensive," he says. "You will spend more money on a MVS setup opposed to an AES

Did You Know?

■ The system's launch price in the US was $649 (two controllers, one game) for the Gold System and $399 for the Silver (one controller, no game).

NEO BOMBERMAN 1997

One of only two games released by Hudson Soft on the Neo-Geo – the other being puzzle game *Panic Bomber*. *Neo Bomberman* is, as you would expect, a fairly traditional take on the established *Bomberman* concept. It benefits from excellent visuals and sound, but lacks an AES edition – if you're interested then you'll have to pick it up on an MVS cart.

MONEY IDOL EXCHANGER 1997

A puzzle title where you match together coins to clear an ever-falling flood of currency, *Money Idol Exchanger* is one of those games which is easy to pick up but difficult to put down. Aided by some incredibly cute visuals, it's another often overlooked classic in the Neo-Geo library. Sadly, no AES version exists.

SHOCK TROOPERS 1997

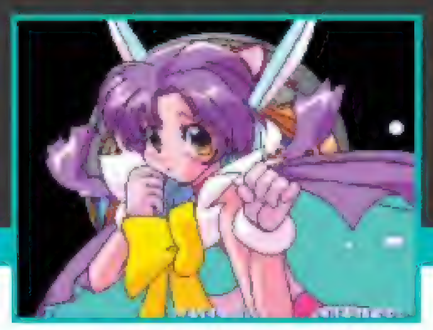
Saurus' take on the tried-and-tested *Commando* template is a graphical tour de force packed with explosions, gunfire and it is absolutely packed with character. Massive sprites, varied environments and an excellent two-player mode all combine to make this feel like a top-down *Metal Slug*, and it's one title that should be high on everyone's list.

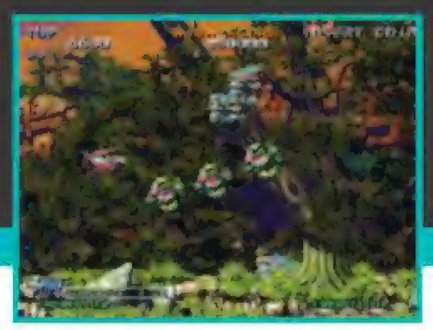
BLAZING STAR 1998

The sequel to the equally excellent Neo-Geo shoot-'em-up *Pulstar*, *Blazing Star* boasts a combination of pre-rendered and hand-drawn sprites, and uses the host hardware's scaling capabilities very effectively indeed. Weighing in at a considerable 348 megabits, this is one of the system's most beloved blasters, and with good reason.

METAL SLUG X 1999

Essentially a remix of 1998's *Metal Slug 2*, *Metal Slug X* is considered by some fans of the run-and-gun series to be the best offering. One of the franchises which arguably defines the Neo-Geo format, *Metal Slug*'s appeal remains undiminished even after all these years thanks to its fusion of tight gameplay, amazing visuals and over-the-top carnage. Essential.





» The Neo-Geo catered to two-player gaming with two available ports on the system's front.

> **Developing for Neo-Geo is kind of like working on a classic car**
>
> Timm Hellwig

setup initially, but it will pay for itself when you save thousands of pounds on games."

The Neo-Geo's status as one of the most desireable gaming systems of all time has ensured continued developer interest right up to the present day, making it one of the longest-supported domestic console formats, although the number of active developers is predictably tiny. One of the most notable is German studio NG:DEV.TEAM, which has been responsible for recent MVS titles such as *Last Hope* (2006), *Fast Striker* (2010), *Gunlord* (2012) and the forthcoming *Kraut Hunter* (2016). NG:DEV.TEAM founder Timm Hellwig explains that the active and enthusiastic community which has grown up around the system means that his company can continue to produce new software. "The support of the community is great, and we still have a lot of fun developing games for it," he says. NG:DEV.TEAM's expertise in coding for SNK's system means Timm is ideally placed to comment on the task of creating software for a console whose technical zenith was almost three decades ago. "It's very hard sometimes as every little thing can become a challenge," he explains. "In some aspects it's easier though, as we not only have full control over everything, we also know every bit of the system. With newer game systems everything is abstracted; developers neither have access to it nor do they know what is going on under the hood of the machine. Developing for Neo-Geo is kind of like working on a classic car."

NG:DEV.TEAM goes the whole distance when it comes to making new Neo-Geo games, not only manufacturing MVS carts but also creating unique AES editions – complete with case, inlay and manual – for home collectors. The prices are eye-watering, with AES versions costing around £390. You might assume that it would be financially impossible to keep this kind of software support going, but that isn't the case. "There's enough demand to build a successful business from it," states Timm. "We have slow but steady growth in the market. The high cartridge prices help to make this possible. At significantly lower prices, the business model would not work."

New software is just one way in which the Neo-Geo brand is being kept alive. Christopher Taber's Analogue Interactive is using lavish hardware to maintain the gaming public's interest in SNK's aging system, and has to date produced a trio of super-exclusive systems which push the already desirable brand into new levels of luxury. The first wooden Consolized MVS was followed by the CMVS Slim, and both machines are encased in solid wood. More recently Taber's company has produced the Analogue NEO, which is a CMVS combined with two joysticks all in one piece of wood for the ultimate arcade experience. All of Christopher's ▶

» Although some games are insanely expensive, it's possible to get plenty of decent titles at reasonable prices.

» Many Neo-Geo owners prefer to get their hands on earlier machines, as the output is better on them.

Did You Know?

■ 2004's *Samurai Shodown V Special* is the last official game for the system published by SNK. It shipped on a 708 megabit cartridge.

machines come with RGB, component, S-Video and composite output, ensuring that they work on practically any television set you could choose to hook them up to. This is the very upper tier of Neo-Geo collecting. "Every single Analogue CMVS is entirely hand-crafted," Christopher explains. "Every piece of wood is hand selected by our woodworker and we only use the most beautiful pieces of each board foot – the ones with the most stunning grain patterns. Everything is entirely built and assembled by hand in the USA. Our Neo-Geo products are very special to us and that is the only way we will ever build them."

Ironically, Christopher says that the impetus to produce these incredibly expensive systems was borne out of the fact that collecting for the AES format was so prohibitive. "Being able to explore the Neo-Geo library with an AES is unreasonably expensive," he says. "With MVS, not only are the games much easier to find, they are a fraction of the cost. Out of all the Neo-Geo platforms, the MVS library represents the most complete, too. MVS is pretty much unanimously regarded as the best way to play Neo-Geo. Problem is, you either have to play with an arcade cabinet or rig up your own DIY Supergun system to play MVS without a cab – which is unreasonable for most people." To overcome this, Christopher took the guts of the MVS system and placed them inside a console-like shell, as well as adding a whole range of outputs. The result is easily one of the most desirable Neo-Geo systems currently available, yet it offers access to the cheaper world of MVS collecting.

In 2012 it appeared that SNK Playmore was getting ready to give its famous system a new lease of life. By far the most audacious attempt to revive the brand, the handheld Neo-Geo X was billed as the second coming of the Neo-Geo line. Manufactured by US firm Tommo with SNK Playmore's blessing, the system is designed to slot into a docking station shaped just like the original AES console, and even comes with a joystick which is based on that one which shipped with the famous machine. What should have been a glorious resurrection of the brand has ended in a bitter legal battle, as SNK Playmore has ordered Tommo to remove stock from shelves and cease production. At the time of writing the Neo-Geo X is still widely available. "Neo-Geo X is still fine to sell," says FunStock general manager Andy Pearson, the main retailer of the console in the UK. "We continue to sell it on a regular basis and all of the new consoles ship with the latest firmware, which resolved a lot of the issues." This confusion has only served to muddle what could have been a genuine revival of the legendary brand.

> **"Everything is entirely built and assembled by hand"**
> Christopher Taber

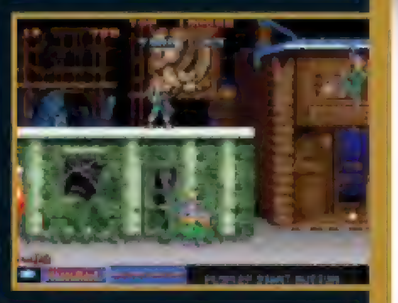
The Neo-Geo X furore is perhaps indicative of the kind of company that SNK Playmore has become – but the story continues to twist and turn. In August 2015 SNK Playmore was purchased by Chinese investors with the intention of using the company's vast library of IP to create a media empire which will cover games, anime, movies and much more besides. Time will tell if this grand vision can be pulled off, but it's highly unlikely we'll witness another console as unique as the Neo-Geo. "Releasing a console which is purely for gaming for a hardcore fanbase is going to be an exceptionally rare thing," says James. "I think the closest thing to that right now would be the PlayStation Vita, which seems to be a bastion ▶

» As with many consoles of the time, the Neo-Geo AES sports a reset button.

Non-Ported Exclusives

Five fantastic NEO-GEO games that never reached other systems

CYBER-LIP 1990



■ Despite the odd name and rough visuals this remains a classic and it is said that some of its developers would go on to work on *Metal Slug*. Borrowing concepts from Konami's famous *Contra* franchise, *Cyber-Lip* is packed with action and is still pleasantly challenging.

ZED BLADE 1994

■ Also known as *Operation Ragnarok*, *Zed Blade* is a shooter which has largely been forgotten by the SNK faithful. It's not in the same league as *Blazing Star* or *Viewpoint*, but its status as a true Neo-Geo exclusive makes it worth a closer look. The visuals are also eye-catching, especially for 1994.

WINDJAMMERS 1994

■ Another solid Neo-Geo classic, *Windjammers* is a sports title where the object is to hurl a disc into your opponent's goal. Crazy power-up moves and trick shots make this souped-up take on *Pong* compelling when two players are involved, and its reputation ensures it is in constant demand.

NEO DRIFT OUT: NEW TECHNOLOGY 1996

■ The Neo-Geo hardware couldn't handle 3D visuals so driving games usually adopted a fixed perspective – like this rally title from Visco. Fluid controls and short courses make this the ideal pick-up-and-play racer, and it's surprising how authentic the rallying experience feels.

NIGHTMARE IN THE DARK 2000

■ Playing a lot like Taito's *Bubble Bobble* and *Don Doko Don*, *Nightmare In The Dark* boasts the kind of visuals you'd expect to see Tim Burton come up with, and also showcases a superb soundtrack. Exclusive to the console, AM Factory's excellent title has sadly been ignored by a great many gamers.

Collector interview

Vinnie Stokes of Facebook's G.G.G. shares his love for SNK's console

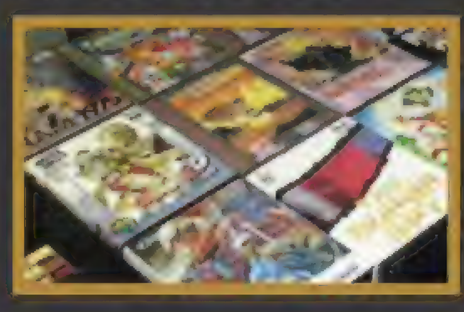
What drew you to collecting for the Neo-Geo AES?
I always wanted a Neo-Geo as a teenager, but I could have never afforded one back then. Neo-Geo (in the arcade) always had the edge as a teen… I loved *Super Sidekicks*.

How complete is your collection, is there anything you're still after?
My AES collection isn't that big, around 15 games. I also have the Neo-Geo pocket, Colour (with games), CD, Neo-Geo X and a full-size arcade cabinet, the cabinet has a 150-in-one cart.

Why do you think the machine remains so collectible?
The Neo-Geo for many collectors is the ultimate Nineties arcade experience, only true gamer/collectors appreciate them to justify the expense of collecting them.

Do you think the games are worth the money they go for?
Everything has a price I guess, but yeah, they are worth it. If you want arcade quality then there is no competition.

Do you have a Neo-Geo CD? How does it compare?
I do have a Neo-Geo CD, but I've never played it. Can't beat blowing a cart in my opinion.



What ten games would you recommend to those on a budget?
There are lots of £30-£50 games you can pick up, mainly fighting ones, to be honest. *Sidekicks* is a must-have for footy fans though.

Do you feel the Neo-Geo X is a good compromise for those that can't afford the real deal and just want to experience the games?
The Neo-Geo X is another I just had to have in my collection but it's still sealed in its box, never played. So my answer to that is, nothing compares to firmly pushing that big old cart into the slot and flicking the switch.

Did You Know?

■ The Neo-Geo's colour palette was 65,536 colours, and it could display 4096 colours on-screen at any time.

Neo-Geo: The Alternatives

If you're not willing to drop hundreds of pounds to buy your way into the Neo-Geo club, don't despair – many of its most games made the journey to more affordable platforms

1 METAL SLUG ANTHOLOGY PSP

PRICE: PSP: £15
Neo-Geo £4500

PROS: Six Neo-Geo games, bonus art and a developer interview.

CONS: Lengthy loading times.

★★★★☆

2 METAL SLUG 3 XBOX

PRICE: Xbox: £4
Neo-Geo £500

PROS: Offers two bonus scenario games.

CONS: Continues send you back to the start of the stage.

★★★★☆

3 SNK ARCADE CLASSICS VOL. 1 PSP

PRICE: PSP: £10
Neo-Geo £4300

PROS: 16 Neo-Geo games, a great spread of genres.

CONS: Long loading times, a little slowdown. ★★★★☆

4 THE KING OF FIGHTERS '97 SATURN

PRICE: Saturn £10
Neo-Geo £70

PROS: Faithful port, with an great soundtrack.

CONS: Long loading times, slightly muffled sound effects and speech. ★★★★☆

5 SNK VS CAPCOM: SVC CHAOS XBOX

PRICE: Xbox: £5
Neo-Geo £220

PROS: High resolution HUD, online play (now closed).

CONS: Few extras. ★★★★☆

6 METAL SLUG X PLAYSTATION

PRICE: PlayStation: £12
Neo-Geo £700

PROS: Faithful gameplay, plus an added Combat School challenge mode.

CONS: Cut-down animation, long loading times and poor sound effects. ★★★☆☆

7 THE KING OF FIGHTERS COLLECTION: THE OROCHI SAGA PS2

PRICE: PS2: £10
Neo-Geo £330

PROS: Five games, with unlockable music/art galleries.

CONS: Slight screen stretching, occasional audio bugs. ★★★☆☆

8 GAROU: MARK OF THE WOLVES DREAMCAST

PRICE: Dreamcast: £18
Neo-Geo £475

PROS: Unlockable gallery, arranged soundtrack.

CONS: Replaced voice effects, some slowdown issues.

★★★☆☆

9 TWINKLE STAR SPRITES DREAMCAST

PRICE: Dreamcast: £40
Neo-Geo £225

PROS: Arranged soundtrack, option to remove slowdown.

CONS: Missing many extras from prior Saturn version.

★★★★☆

10 NEO-GEO X

PRICE: Neo Geo X: £120
Neo-Geo £3000

PROS: Replica console with joystick, HDMI output, 20 built-in games plus the option to buy more, and a handheld unit!

CONS: Relatively expensive, new game releases discontinued, handheld's screen is sub-par. ★★★★☆

Special thanks to The National Videogame Arcade and Vinnie Stokes for supplying their Neo-Geo consoles for the photography in this issue. Check out Vinnie's Facebook page Game Gear Group for more information.

> **"A lot of things made the Neo-Geo irresistibly exclusive"**
>
> James Mielke

of hardcore games coming out of Japan, but it's still not quite the same. The Neo-Geo was a console borne out of an arcade legacy, and with arcades what they are – or aren't – today, I have serious doubts there will ever be another like it."

Jeremy is in agreement. "A lot of things made the Neo-Geo irresistibly exclusive," he summarises. "Mainly the price of the console, the price of games, and the inability for youngsters to obtain it. It brought the arcade experience home, which isn't an issue anymore. These days the arcade experience is at home – you can't go out to an arcade like you use to, and come home to your vastly-underpowered NES longing for more."

SNK broke exciting new ground with the release of its Neo-Geo system, but its obscenely high price point and obsession with fighting games arguably stopped it from being the universal success that the company craved so greatly. We're eternally grateful that SNK did shoot for the stars however, because it delivered a unique console that remains as exciting and desirable today as it did on its original release.

IN THE KNOW

- **» PUBLISHER:** Activision
- **» DEVELOPER:** John Van Ryzin
- **» RELEASED:** 1984
- **» PLATFORM:** Atari 2600
- **» PLATFORM:** Platformer/ Shooter

» [Atari 2600] Rodenck Hero drops a stick of dynamite next to a wall.

» [Atari 2600] As well as deadly creatures, Roderick must avoid lanterns, which blow out on contact.

» [Atari 2600] Some of *H.E.R.O.*'s caves are maze-like and don't offer Roderick any clues to their exits.

H.E.R.O.

John Van Ryzin's reaction when Activision shelved his first title was to create something even better. John tells Rory Milne how this next project became the Atari 2600 classic H.E.R.O.

The story of how Activision was co-founded by three disillusioned ex-Atari Inc. developers in Santa Clara, California in 1979 is an often-repeated one. Less well known, however, is that in the mid-Eighties, Activision set up operations in other US states in order to tap the talent out of the immediate reach of its sunny headquarters. The first of these outposts gave employment to a promising young coder named John Van Ryzin. "The New Jersey office was the first satellite office Activision opened, others followed," John begins. "I was developing games for the Apple II with a small group I met while at a summer engineering job. We were all impressed by the quality of Activision games. Garry Kitchen developed Atari 2600 games, and he contacted them. His work on *Donkey Kong* impressed them, and Activision hired all of us and opened an office for us to work in."

Thrilled at joining such a successful and respected firm, John worked tirelessly for the subsequent nine months on *Cosmic Commuter* – the game he intended to be his first Activision release. But John's hopes for this title were dashed during the playtesting stage of an approval process, which ultimately led to *Cosmic Commuter* being shelved. "I was crushed," John admits. "But Activision just told me to make another game. During development, the senior designers told me it was great technical work. But when finished, people did not think it was that much fun. So I was determined to make my next game *very* fun… that game was *H.E.R.O.*."

With a clear sense that this next project needed to excite players in a way that his last effort hadn't been considered to have done, John looked to a field trip and childhood memories to inspire a hero with a helmet-mounted laser who would fly around caves using a propeller backpack. "I had the idea while touring a cave on a weekend trip," John says of *H.E.R.O.*'s cavern setting, before citing the main influence behind his flying, laser-firing protagonist and dismissing suggestions of licensing deals. "I was a Superman fan as a kid – superhero types in general – he could emit solar energy from his eyes. At that time, Activision only made original games, so a licensed game concept never crossed my mind. The helicopter backpack idea just seemed fun."

With his core gameplay elements decided on, John's next step was to realise his concept in digital form, which would involve translating paper designs of *H.E.R.O.*'s characters into binary and editing values in a table in order to tweak the game's cavernous levels. "I designed and coded the figure, cave and controls. Then I started making up the levels, creatures and features," remembers John of his initial

H.E.R.O. 101

■ Much more than a straight platformer thanks to its brilliantly realised helicopter mechanic, *H.E.R.O.* requires only basic piloting to save the miners in its early levels, but demands skilful flying to ace it's later rescue missions. Tight spaces, hostile creatures and deadly set-pieces define *H.E.R.O.*'s 20 colourful cave systems.

BACKPACK BATTLERS

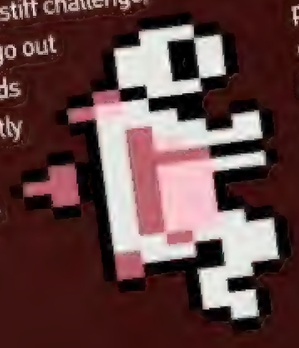
Gaming's other backpack-powered heroes

JET PAC
SYSTEM: ZX Spectrum
YEAR: 1983

■ Total focus and spatial awareness are essential to success in this classic spaceship-building blaster. Like *H.E.R.O.*, *Jet Pac* sees a backpacked protagonist dispatching fierce creatures. Braving these hoards while assembling ships never gets old, which likely explains *Jet Pac* reappearing in *Rare Replay*.

DROPZONE
SYSTEM: C64 **YEAR:** 1984

■ If you lack time or patience it's probably best to aim for getting better at Archer MacLean's *Defender*-inspired shooter rather than mastering it. But despite the game's stiff challenge, it always gets one more go out of you. Arcade-like sounds and pyrotechnics perfectly complement the firefights of *Dropzone*'s backpacked hero.



ROCKET KNIGHT ADVENTURES
SYSTEM: Mega Drive **YEAR:** 1993

■ Starring Sparkster, an armoured, rocket-pack wearing opossum, *Rocket Knight Adventures* is a scrolling platformer with shoot-'em-up interludes. Rocketing is limited during platforming, but Sparkster is fully airborne during shooter sections. Tight gameplay and level design make his fight against pigs and robots an epic one.

BURNING RANGERS
SYSTEM: Saturn **YEAR:** 1998

■ As a futuristic firefighter in Sonic Team's Saturn swansong, you're briefly trained to use a jetpack and fire extinguisher before being dropped into a series of rescue missions. Occasional glitches mar *Burning Ranger*'s visuals, but they don't affect the game's set-pieces or innovative audio-led navigation.

CONVERSION CAPERS

More helicopter heroics

APPLE II

■ Given the original *H.E.R.O.*'s visuals are untextured and the limitations of the Apple II hardware, a better-looking version of *H.E.R.O.* is delivered by Apple's 8-bit than might be expected. More importantly, Apple II *H.E.R.O.* nails the original's gameplay.

ATARI 5200

■ *H.E.R.O.* for the 2600's successor takes everything that's great about the way the original version plays and adds improved visuals that better fit the higher resolution offered by the 5200. The 5200 version of *H.E.R.O.* also ups each screen's colour count.

ATARI 8-BIT

■ Atari 8-bit *H.E.R.O.* basically looks identical to the 5200 version, but because the 5200 has an analogue joystick, the controls handle slightly differently between ports. Thanks to its digital stick, the Atari home computer *H.E.R.O.* feels the closest to the original.

COMMODORE 64

■ A combination of low-res sprites and high-res backgrounds is used for the C64 *H.E.R.O.* with the result being one of the best looking versions of the game. In terms of controls and timing, the C64 iteration *H.E.R.O.* plays very similarly to its 2600 inspiration.

DEVELOPER HIGHLIGHTS

X-15 ALPHA MISSION (PICTURED)
SYSTEM: C64
YEAR: 1987

HEAVY SHREDDIN'
SYSTEM: NES
YEAR: 1990

SUPER BATTLETANK
SYSTEM: Game Boy
YEAR: 1992

» [Atari 2600] Agile creatures in confined spaces prove challenging for Rodenck to dispatch

"The underground river was a eureka moment. Before having that idea I was limited in what the levels could be"

John Van Ryzin

design process. "It's amazing how sophisticated today's tools are – I drew the characters on graph paper and translated them into bytes for the program to use. The level displays were generated from lookup tables in the program. I would alter the tables, play [the game], tweak it, and repeat."

When asked to detail the development tools used to code *H.E.R.O.*, John acknowledges just how primitive this kit was before reinforcing how advanced it had been in comparison to the tools he had worked with prior to joining Activision. "I conceived and designed *H.E.R.O.*, created the art and sounds, and programmed it in Assembly language. I did not have any art tools, and the Atari 2600 did not have an operating system or software to start with. The whole thing was done from scratch at the lowest level. I was given the code to display the Activision logo, [and] Activision supplied a PDP-11 computer and Atari 2600 development devices that had debugging. That was real state of the art, because before that I wrote games on the Apple II with no debugging tools at all."

The coding of complimentary mechanics would elevate John's game from a simple platformer/shooter into a far more evolved challenge. John gave his hero a secondary weapon – a limited supply of dynamite – which could blow up obstructive walls but posed a deadly risk if its blast zone wasn't cleared. John also put snakes in the crevices of his title's cave walls that would move in and out, blocking and unblocking gaps that his hero would have to squeeze through. "I was focused on adding as many play mechanisms as I could. Fun was my primary goal!" John grins, when quizzed about *H.E.R.O.*'s explosives. On his reptilian antagonists, he recalls, "it seemed natural for a snake to be hidden and ambush the player."

Beyond implementing *H.E.R.O.*'s component parts, John committed serious time to perfecting his hero's highly responsive helicopter backpack and refining the positioning and movements of the hostile creatures inhabiting his game's rainbow hued mines. "The most amazing thing about Activision back then was that we had no deadlines or budgets for games – it was done when it was good. It took lots of experimenting to get the controls right. My favourite Activision game was a skiing [game], that game was based on delicate touch control, so I combined that idea with what I thought it must be like to fly a helicopter. I [also] spent a lot of time adjusting the locations of everything and then tweaking them."

Equal attention was paid to *H.E.R.O.*'s level of difficulty, which John made a smooth curve of by gauging his game's middle stages according to his own understandably high level of proficiency before adding a less demanding set of early stages and a more demanding set of final stages. Playtesting by John's fellow developers made certain that *H.E.R.O.*'s challenge was free from large difficulty spikes. "I designed the middle levels first – the middle levels had most of the elements," John explains. "I then made easier and harder levels based on those components. I did that because it was hard for me to judge game difficulty because I played it all [the time], I got great feedback from the other designers in the New Jersey office."

A determination to see *H.E.R.O.* published led John to devise various elaborate set-pieces for his game, each of which complimented the title's sprawling cave locations. Underground rivers populated with tentacled terrors and stretches of flowing lava would inject more fun into *H.E.R.O.* by forcing the need for precise aerial manoeuvres and swooping on to and off rafts at breakneck speeds. "Because of my failure with *Cosmic Commuter*, I was focused on having as many gameplay elements as possible to make the game fun and interesting. The underground river was a eureka moment. Before having that idea I was limited in what the levels could

» [Atari 2600] Flying Roderick to safety before a stick of dynamite explodes demands precise piloting.

COLECOVISION

■ It has brighter colours, granted, but visually *H.E.R.O.* for the ColecoVision isn't a million miles away from the C64 *H.E.R.O.*. It's easier to make this version's helicopter-backpack hover, though, which makes some aerial manoeuvres that much simpler to pull off.

MSX

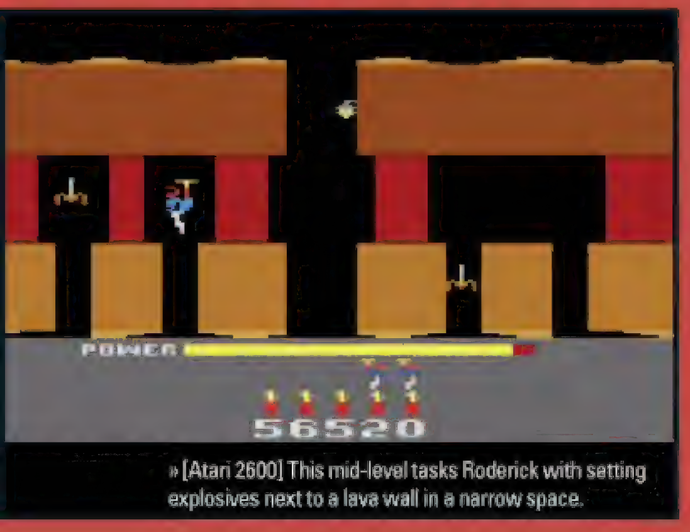
■ Aside from its sound effects, the MSX *H.E.R.O.* is essentially a carbon copy of its ColecoVision counterpart. As some MSX joysticks only have one button, though, dynamite is laid by pushing down on the MSX's controller, which can result in some unexpected explosions.

SEGA SG-1000

■ Sega's version of *H.E.R.O.* for its first console broadly plays like the original but makes a number of changes. The SG-1000 *H.E.R.O.* has catchy tunes, female miners, stalactites and lava geysers. Every level is green and its hero has thrown away the propeller for a jetpack.

ZX SPECTRUM

■ The Spectrum *H.E.R.O.* could have been an awful lot prettier. Visuals aside, though, it faithfully reproduces the original's gameplay, mechanics and levels, and the controls of its helicopter backpack respond much like those of the Atari 2600 game.



» [Atari 2600] This mid-level tasks Roderick with setting explosives next to a lava wall in a narrow space.

be. It was all about coming up with anything interesting that might be in a cave and then making it play. The raft and tenacled monster were added towards the end of development."

Given the shelving of *Cosmic Commuter*, it might be reasonable to imagine John being given a certain amount of input from Activision's Californian base on his second game, but *H.E.R.O.* was designed solely in New Jersey. Although John's game did benefit from a co-worker's brilliant suggestion that *H.E.R.O.*'s lanterns should blow out if flown into. "I only interacted with the New Jersey developers, who gave me feedback and inspiration. Even if someone did not give me a specific [critique], any feedback could spark a new idea. So I have to give credit to my co-workers. One developer watching me play the game said: 'It would be cool if the lights broke.' So I added that. It just seemed cool once it was working!"

In an effort to make sure *H.E.R.O.* would offer good value, John coded a 'Pro' mode into his game, anyone who completed its final stage would then enter a high score chase that would repeatedly loop through levels 13 to 20. "I did not think a player would want the game to end until they chose to stop playing," reasons John. "The player could have a new goal – to get the highest score!"

The layers of gameplay John had built his game from, his fine-tuning of its mechanics and the sheer determination he had shown in creating a fun-packed gaming experience ensured his second title for Activision passed its approval process with flying colours. "The California office did the final review, marketing, manual and packaging. The senior designers in California played the game and decided it should be published. I was told they also tested it on consumers and it rated as high as *Pitfall.*"

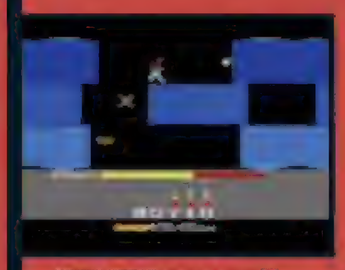
On the commercial success *H.E.R.O.* received on its release, John has mixed feelings, but his regrets over his game's financial fortunes are tempered by a greater sense of satisfaction and achievement gained by the title's climb to the top of the sales charts. "It was exciting. Unfortunately the game market crashed at the time, so I did not get the financial rewards I might have gotten. But hey, how many people can say 'I designed a top ten videogame!' That is priceless."

Players' reactions to *H.E.R.O.* were similarly positive, and John's game soon became an Atari 2600 favourite. But there were fans who battled their way to the near-impossible score of 999,999 points that had a few harsh words for the New Jersey coder. "I did not think anyone could do it. When Activision wrote the manual it asked if there was anything hidden in the game, so I told them about the '!!!!!!' score after 999,999 points. It then added text in the manual saying something 'special' happened if you maxed out the score. I got hate mail about that from people who did it! They were disappointed all they got was a '!!!!!!' as a reward."

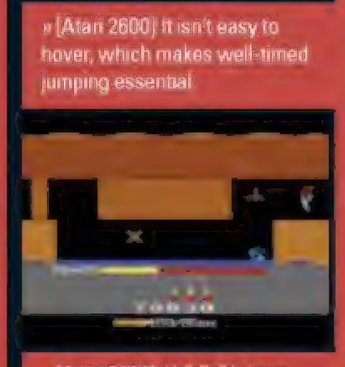
H.E.R.O.'s success led to ports to other consoles and home computers. Although John wasn't on coding duty for these ports, he approved of the tweaks made and contributed art ideas. "I was asked to review the conversions. It was interesting to see enhancements the made for the more powerful game systems. I also influenced the packaging. In the original packaging the character was kind of goofy – I had imagined him as a comic book superhero."

Prompted for his final take on *H.E.R.O.*, John's response is succinct, and his one regret clearly pales in comparison to the pride he takes in having created his Activision classic. "I should have made it do something better after 999,999 points, or I should not have told the manual writers it had a special '!!!!!!' display. [But] I am very proud I developed *H.E.R.O.*." ★

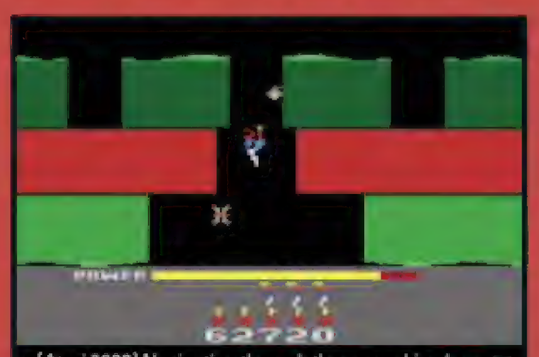
» John Van Ryzin continues to code to this day and is proud of his work on *H.E.R.O.*



» [Atari 2600] It isn't easy to hover, which makes well-timed jumping essential



» [Atari 2600] *H.E.R.O.*'s later levels contain a creature that can drag Rodenck underwater



» [Atari 2600] Navigating through these crushing lava walls requires complete concentration.

» [Atari 2600] Roderick relies on sheer flying skill to avoid an underwater river and a poisonous snake.

Many thanks to John Van Ryzin for his memories.

CLASSIC MOMENTS

Tales Of The Arabian Nights

» **PLATFORM:** C64 » **DEVELOPER:** IAN GRAY » **RELEASED:** 1984

Who let these genies out of the bottle? Arriving at the third stage of this Arabian adventure, our intrepid hero Prince Imrahil finds himself trapped in an underground cavern. His only method of escape is to spell out ARABIAN by collecting seven man-sized jars bearing those letters, which presumably triggers an 'Open Sesame' reaction. Oh, and he must pick them up them in the correct order, which is quite a challenge given the word contains three As.

To compound this already arduous task, a quartet of evil genies patrol the cave, firing lightning bolts at the hapless prince as he skips from ledge to craggy outcrop. Keep your eye on the pale blue one. Whilst the other three are content to follow fixed paths, this spiteful sprite tracks your position relentlessly, forever closing in at the most inopportune moments with an indefatigable determination to snuff out your lamp light. He's like an 8-bit Nemesis and when you do finally snaffle that last jar, it's like you've had three wishes granted at once. ★

BIO

Loosely based on the famous collection of folk stories told by Scheherazade to postpone her execution, *Tales Of The Arabian Nights* may well take you 1001 attempts to complete, such is its brutal difficulty. Five challenging platform stages are interspersed with three shooter levels. Prolific author Ian Gray produced over 20 C64 titles for Interceptor Micros, including the proto-*GTA*, *Siren City* and the underwater epic *Aquanaut*, before leaving the industry behind in the early-Nineties.

MORE CLASSIC TALES OF THE ARABIAN NIGHTS MOMENTS

Hello Sailor

The opening screen, set aboard Sinbad's ship, swiftly introduces players to the punishing nature of the game. Avoiding ravenous birds, cannonballs and marauding octopi to collect the seven giant jars scattered amongst the rigging requires careful route planning, pixel perfect leaps of faith and infinite patience. Many never made it ashore.

Magic Carpet Ride

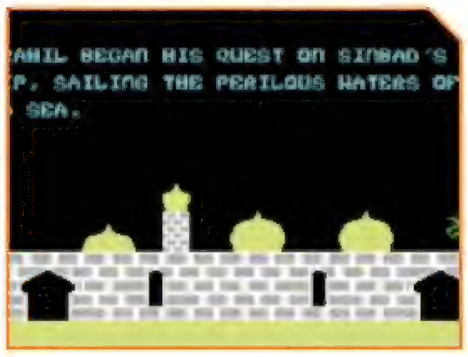
After surviving the gruelling platform levels, the shoot-'em-up stages provide some relief. After negotiating a dangerous rafting mission through crocodile-infested waters, you take to the skies twice on an undulating Persian rug, dodging fire from ground-based archers and dispatching other carpet riders with some well-aimed bolts of your own.

In the Night Garden

Sandwiched between two stages set on the palace walls, both containing elements of old arcade title *Hunchback*, spear-prodding guards and all, is this tricky screen. It's easy to get caught halfway up the long ladder whilst admiring the flowers below, a nod to Ian Gray's bizarre *Get Off My Garden!* released the same year. And isn't that a Megatree?

Talk Tonight

The rousing rendition of Rimsky-Korsakov's *Festival at Baghdad* by Chris Cox adds to the atmosphere of the game but it's the speech that introduces each new chapter which really impresses. Hearing your C64 talk in 1984 was still unusual and rather magical, even if it did sound like a tipsy, chain-smoking Metal Mickey with intonation issues.



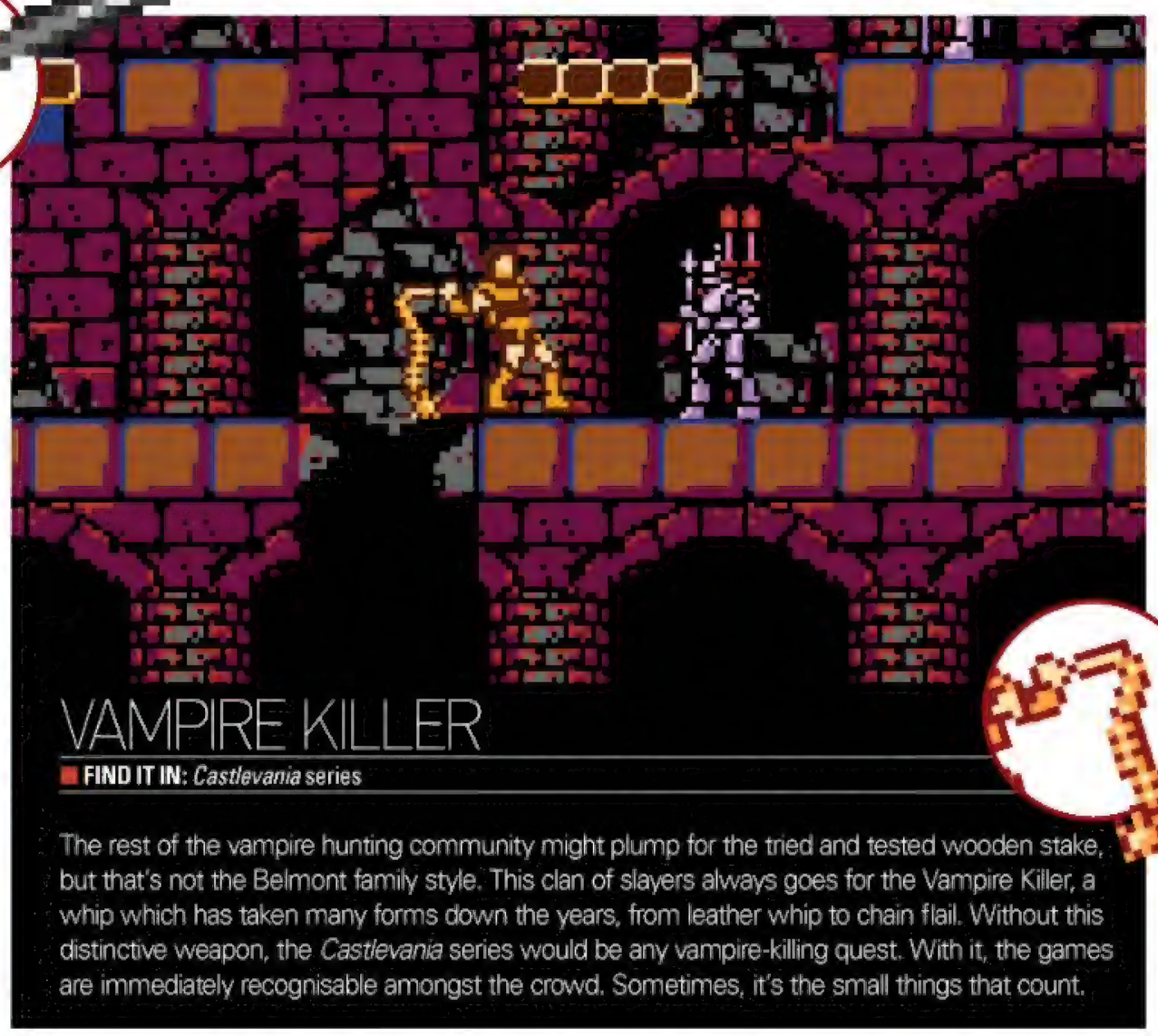
30 GREATEST WEAPONS EVER!

It's fair to say that not all weapons are created equal. Some are just more powerful, funnier or simply cooler to carry around – and that's what makes them so memorable. Join Nick Thorpe for a tour of our fantasy armoury...

BASEBALL BAT

FIND IT IN: *Double Dragon, Streets Of Rage, Super Smash Bros.* etc.

Knock 'em out of the park with one of gaming's simplest implements of destruction. Essentially just a solid stick made of wood or metal, the Baseball Bat is a beat-'em-up staple that typically ranks amongst the most powerful weapons available to you. It's got the range that allows you to put some distance between yourself and your attackers too, making it invaluable.



VAMPIRE KILLER

FIND IT IN: *Castlevania* series

The rest of the vampire hunting community might plump for the tried and tested wooden stake, but that's not the Belmont family style. This clan of slayers always goes for the Vampire Killer, a whip which has taken many forms down the years, from leather whip to chain flail. Without this distinctive weapon, the *Castlevania* series would be any vampire-killing quest. With it, the games are immediately recognisable amongst the crowd. Sometimes, it's the small things that count.

CHAINSAW

FIND IT IN: *Splatterhouse, Doom,* etc.

There's a certain feeling you get when you chainsaw an enemy to death in a game. It's a weird, visceral reaction – partially comprised of disgust at the guts and blood doubtlessly flying everywhere, but mostly a grim satisfaction with the suffering you've just inflicted, and at least a little anticipation of what you'll do to the next victim. It's the noise, the fact that you have to get up close, and the gore. Oh, the gore. Yet weirdly, it's far more common for enemies to bear chainsaws than for games to allow you to use them yourself. We blame *The Texas Chainsaw Massacre.*

TRON DISCS

FIND IT IN: *Discs Of Tron*

In real life, a flying disc to the head is little more than an annoyance, albeit a painful one. Seriously – try walking through a disc golf course some time and tell us otherwise. In the world of *Tron* though, a direct hit from a disc will cause you to be derezzed – that's being deleted, if you're not hip to the lingo. Playing catch has never seemed deadlier.

SCORPION'S SPEAR

FIND IT IN: *Mortal Kombat* series

The gush of blood that erupts from the chest of Scorpion's hapless opponent is the sign – the spear has landed, and the undead ninja is about to pull his foe in for a close-quarters beating. Sure, you can duck it, jump it or even block it. Sure, your CPU opponent almost always will do one of those things, making it practically useless against non-human opponents. But when it lands and the famous "Get over here!" voiceover plays, the good times are about to roll. The spear has become such a key part of Scorpion's persona that it's been implemented in fatalities, and was even a part of the character's lore.

30 GREATEST WEAPONS EVER!

GRAVITY GUN

FIND IT IN: *Half-Life 2*

As advances in 3D graphics began to slow down, developers started to find ways to exploit additional power in different ways – and it's arguable that nobody has done a better job with enhanced physics than Valve, which used its model not to create realism, but to distort it with one of the best weapons ever created. The genius of the Gravity Gun isn't just the excellent visual effect of picking up nearby objects and flinging them around – it's the way in which it's used. Most guns only solve the problem of enemy aggression, but the Gravity Gun's ability to manipulate objects gives it an exceptional secondary purpose as a puzzle-solving tool. No weapon design since has even come close to the innovation on show here, with the possible exception of the Portal Gun from Portal – but of course, that's Valve being innovative again.

BIZARRIANS

FIND IT IN: *Golden Axe* series

If you're going to ride a creature into battle, it needs to be fearsome – something like an octopus with the legs of a spider. *Golden Axe* doesn't give you that – instead it gives you the Bizarrians, a range of slightly odd creatures that nevertheless give you a significant battle advantage. The wingless dragons are traditionally mean, the red one spitting fireballs and the blue one producing a close-range blast. However, it's the excellent Chicken Leg that we love, thanks to its funny name and tail whip attack.

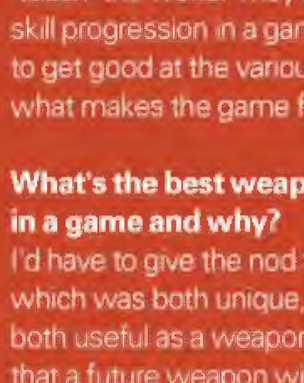
VEGA'S CLAW

FIND IT IN: *Street Fighter* series

What kind of jerk would carry a bladed weapon into a fist fight? It could only be Vega, the *Street Fighter* series' resident narcissist. As well as using it to murder the ugly in series lore, it's a key part of his look and a unique mechanical oddity that sets him apart from the rest of the cast. The claw can be knocked off and even voluntarily discarded in later games, but doing so is ill-advised – without it, Vega's range, power and moveset become limited.

SCOTT MILLER

The Duke Nukem creator weighs in on weaponry



How do you go about balancing weapons for multiplayer games like *Duke Nukem 3D*?
It's really hard to truly balance weapons, maybe impossible, actually. But a few things can help. For example, if a weapon is really powerful like an RPG, you make ammo hard to find, and you can make the RPG itself travel slower, so that it's easier to dodge than bullets. So, it's really a matter of playing the game a lot and trying to make a lot of small adjustments over time, until it really feels right.

Where did ideas for high concept weapons like the Shrink Ray originate?
They came from numerous team members during development. The idea was just to come up with several weapons we hadn't seen in other games yet. My personal contribution was the Trip Mine. I had the idea of having a mine that you could attach to the wall, and it would emit a hard-to-see red laser trip beam. Within a few days of suggesting this idea, the coder, Todd Replogle, had it working in the game and everyone loved it.

What do weapons add to a typical videogame?
In a shooter, the weapon is the primary way to 'touch' the world. They also provide most of the skill progression in a game. In other words, learning to get good at the various weapons is a key part of what makes the game fun.

What's the best weapon you've ever used in a game and why?
I'd have to give the nod to *Half-Life 2*'s Gravity Gun, which was both unique, and flexible, in that it was both useful as a weapon and solving puzzles. I doubt that a future weapon will ever top this one.

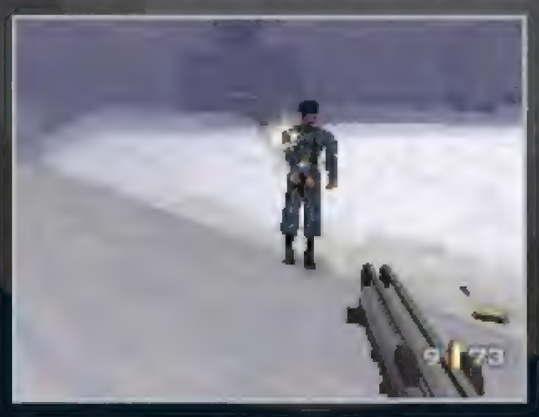
SHRINK RAY

FIND IT IN: *Duke Nukem* series

There's nothing like a fair fight – and with the Shrink Ray in your possession, you'll never have anything like a fair fight. One blast from this unique piece of weaponry will temporarily render your foe so small that a clean kill only requires a quick stomp. Excellent! Just don't revel in your enemy's powerless state for too long, or you'll have to deal with a fully-grown antagonist once again. Oh, and try not to hit yourself with it, because that never works out well.

MISFIRES

While most of gaming's legendary weapons gained their status for being excellent, some are just legendarily crap. We'd rather use our bare fists than walk into combat with any of these...



KLOBB

GOLDENEYE 007

■ With low power and poor accuracy, the Klobb is a joke. In fact, given that it's also got a small clip size that will see you frequently reloading, it's a sure-fire route to failure in *GoldenEye*. Pity poor Ken Lobb, after whom it is named!

DROP SHOT

METAL SLUG X

■ Nearly everything in *Metal Slug* is capable of causing massive carnage, but the Drop Shot is a real duffer thanks to its awkward shot trajectory. If you need to take out a guy hiding behind cover, it's awesome. For anything else? No thanks.

GIANT'S KNIFE

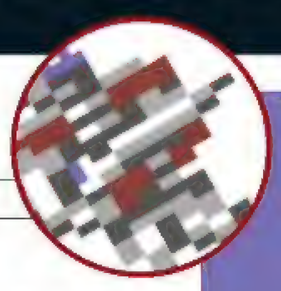
THE LEGEND OF ZELDA: OOT

■ It seems like it will be a really good investment, but the Giant's Knife is rubbish. 200 rupees to buy, and 200 more every time you need to fix the damned thing – and it breaks *way* too often. Leave it and get the Biggoron's Sword.

MORPH BOMBS

METROID

■ They always feel like they should be good weapons, yet the bombs laid by Samus Aran's morph ball are kind of rubbish. They're great for elevating Samus herself, but in an actual combat situation you don't want to use them.



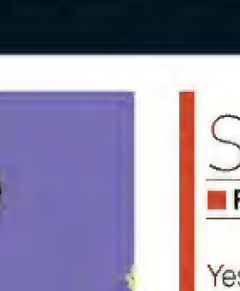
LIGHTNING WHIP

■ **FIND IT IN:** *Turrican* series

You can tell when a weapon is well-loved, because people don't really like to know that it's gone. That's the case with *Turrican*'s Lightning Whip, a limited-range energy weapon that is the hallmark of the early games in the series. Unfortunately, later games dropped it and never felt quite the same as a result. It just goes to show that a good weapon can really make a game tick.

> "If a weapon is really powerful like an RPG, you make ammo hard to find, and you can make the RPG itself travel slower, so that it's easier to dodge than bullets"
>
> Scott Miller

CEREBRAL BORE



■ **FIND IT IN:** *Turok* series

Everyone needs a gun for special occasions – we'd get a bit bored if we were just loading revolver rounds into bodies all day long. Luckily, the *Turok* series delivered something special for when you need a sadistic kill. The Cerebral Bore is one of gaming's nastiest pieces of work. Once locked on to an enemy's brain waves and fired, it will drill into the victim's skull until it reaches the brain. You'd think that would be enough, but no – that's when it explodes, decapitating the victim. It's utterly brutal, but incredibly memorable because of it.

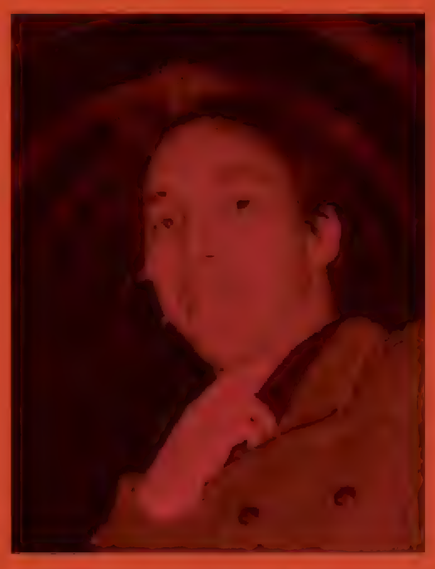
SHURIKEN

■ **FIND IT IN:** Anything with ninjas!

Yes, if you want to be accurate about it, the shuriken is rather less effective than firearms in general. But come on, be honest: would you rather be the resoundingly average Joseph H. Gunman, or a highly trained ninja flinging sharp metallic objects at people with lethal accuracy? Exactly. The knife-style ones are good for both throwing and slashing, but there's something about the star-shaped ones that we love that little bit more.

30 GREATEST WEAPONS EVER!

ALEX TROWERS The Syndicate level designer talks weapons



How were weapons in *Syndicate* selected?
The simple answer is that we made a list. We knew we wanted guns so we started with pistols and kinda worked up from there. The Uzi 9mm stemmed from a love of early Nineties Arnie, as did the minigun. Looking back at it, the guns were pretty simple affairs –other than the Persuadertron, we could have been a bit more creative I guess. The Laser was supposed to be all *Akira* but a bit more technically correct – so not seeing it from the side.

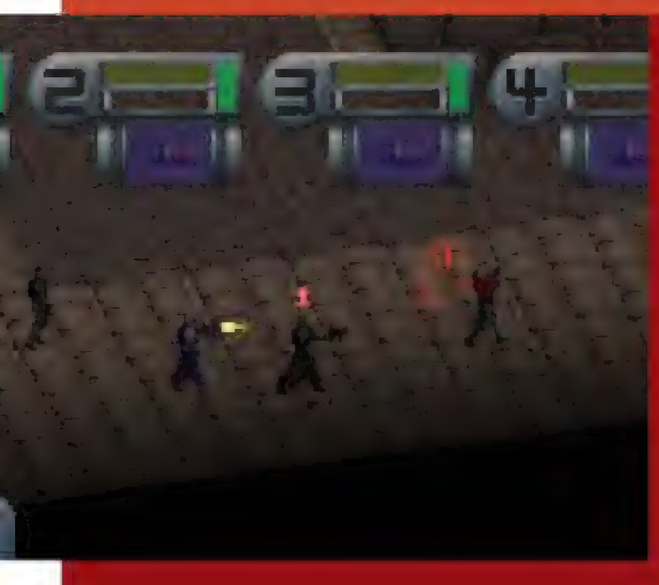
Where did the idea for the Persuadertron originate?
The Persuadertron was Peter (Molyneux)'s idea. It was one of the things that we talked about at Pizza Hut one night when we were thrashing out things we could do with this game. That's when Peter started talking about the drugs affecting people's behaviours and the conversation turned to how they were dispensed (the CHIP) and subsequently how that device could be usurped. I wasn't a huge fan of the weapon – not for what it could do but more for the implementation of it. Granted, it was just one strategy that someone could adopt, but I always think we could have done a better job with it as things like getting into vehicles really looked a bit dodgy when you had an army with you.

How much time was spent balancing the weapons?
Lots of time was spent balancing (read: playing) the weapons. Every lunchtime, without fail, and for a good couple of hours after work each night, we'd all sit down and play networked *Syndicate*. We'd even come back from the pub on a Friday night and drag a few mates up to the office for a late night session – often not finishing until four in the morning on the Saturday. That's when the lion's share of the balancing and the interface got done. In fact, these play sessions continued even after release – which is something hardly any developer gets to say. The only thing that stopped us playing *Syndicate* was *Doom*...

Were any guns taken out?
At one of those sessions, Sean [Cooper] thought it would be cool to make a rocket launcher. All of the other weapons were insta-hit line draws – the code didn't support projectiles, and this would be the first one that did. That and an area-of-effect blast. Rather than add another item slot, we simply replaced a weapon that we hadn't implemented yet – the Gauss Gun (which was originally designed as a weapon that would just damage cyborgs or robots and leave humans alone)– and the rest, as they say, is history. The following day's play session was most excellent fun as only Sean and I knew about this new weapon. Everyone else went about the business of loading up with miniguns and shotguns and the like and we just wiped them all out with vastly superior firepower. The cries of, 'What the f**k was that?' still ring, melodiously in my ears...

Why do you think *Syndicate* remains so popular?
I think it remains popular because everyone is still left to fill in the blanks. The sprites, though detailed and high-res for the time, are never seen very large on the screen. There is gore, but it's not in your face. You therefore have to leave it up to your imagination – which is the most powerful tool at anyone's disposal. Also, there is a very great sense of cause and effect. If you do one thing, something else will happen but it's always your choice. You can go in, guns blazing, but you'll attract attention. Most of the time it's better to put the guns away – which was a first for the time – and mingle with the population going about their business. You weren't spoon fed through the missions either – you were presented with the situation and it was up to you how you resolved it. That's great for player authority.

What I never really understood was how popular it was as a single-player game – as with all Bullfrog games of the time, it was designed as a multiplayer experience first and foremost. Sadly, due to technical reasons, hardly anyone actually got to play it as we intended it to be played. It only ever worked on PC and was only fixed for the *American Revolt* expansion, which had some criminally bad balancing on it.



PERSUADERTRON

FIND IT IN: The *Syndicate* series

We love the Persuadertron, just for being so different to other armaments. Here's a gun that doesn't kill or even wound its victims – no, this is a weapon of mass communication. Specifically, it's used for communicating with civilians, explaining to them that it's a really good idea to start following your agents around and doing exactly what they say. You can use it to gather an *Austin Powers*-style crowd of seemingly useless bystanders, but such a crowd unlocks the potential to do really useful things like grabbing armed and influential types – police officers, enemy agents and the like.

FLAMETHROWER

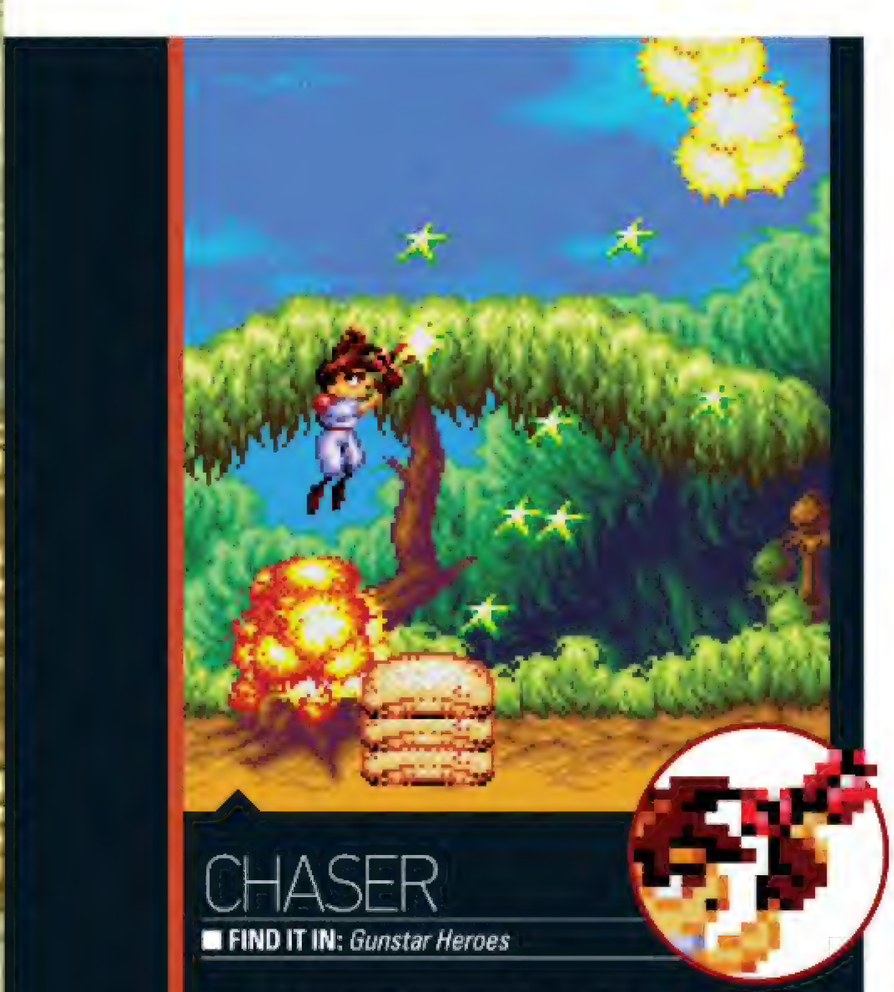
FIND IT IN: *Mercs*, *Metal Slug*, etc.

While the flamethrower typically isn't the most effective weapon against vehicles, there's little better against infantry. If a game puts extra emphasis on its presentation, you can bet that there will be a custom fiery death sprite for enemies killed by flamethrower, as well as some horrifying screams. Mmm, crispy...

METAL SLUG

FIND IT IN: *Metal Slug* series

When the going gets tough, getting in a tank is usually a great option. However, most tanks aren't tremendously versatile – you get in, trundle about and fire. Not so with the Metal Slug. This tank is an absurd piece of machinery, packing powerful cannon rounds and an unlimited heavy machine gun as standard, as well as protecting you from multiple hits. But that's not all – the Metal Slug is possibly the most agile tank of all time, capable of ducking under enemy fire as well as jumping over obstacles, and looking kind of hilarious as it does so.



CHASER

FIND IT IN: *Gunstar Heroes*

When a game fills the screen with as many enemies as *Gunstar Heroes* throws around, aiming at enemies is the least of your concerns. Luckily, Treasure put the Chaser into the game to ease the burden. What sets this apart from the other enemy-seeking guns is the ability to combine it with others. The best combination requires the Lightning Gun – when put together, the two will seek and destroy anything on the screen with incredible efficiency.

MASTER SWORD

FIND IT IN: *The Legend Of Zelda* series

There's a turning point in any hero's quest, when they shed their identity as some random guy with noble aspirations and become a genuine threat to the forces of evil. In the *Zelda* series, this is always the moment that Link picks up the legendary weapon of Hyrule: the Master Sword. It might not always be conventionally powerful (as we've seen from *A Link To The Past*, it can be improved upon), but the Master Sword the only sword with the ability to truly vanquish evil. It also has a number of other uses, notably being used as the key to travel through time in *Ocarina Of Time*.

SUPER SUIT

FIND IT IN: *Earthworm Jim* series

At what point does the balance of power between weapon and wielder shift? Poor old Earthworm Jim must be asking himself that very question ever since he fell into the Super Suit. With it, he gains four limbs and considerable attack powers, most notably the ability to pull his own body out of the suit to use as a whip. Surely, at that point, the suit is using him?

SUPER SHEEP

FIND IT IN: *Worms* series

The Amiga public domain scene was home to countless artillery games that served as a precursor to *Worms*, but they're largely forgotten. Why has *Worms* survived? We'd argue that it's because of the game's unique sense of humour, and while it can be found in everything from the cutesy voice acting to the team names, we'd argue that it's hilarious weaponry that *Worms* truly excels in. Little exemplifies this better than the Super Sheep.

The original Sheep was a surprisingly powerful weapon, but the Super Sheep takes it to a whole new level. Instead of jumping about aimlessly, the Super Sheep dons a cape and allows you to assume control, meaning that you can steer it directly into a pack of enemy worms. However, it's fast and just twitchy enough that you'll have the odd accident, usually killing your own team in the process. That's the key to the laughter – if it was too effective, it just wouldn't work.

KEVIN CARTHEW

Team 17's creative manager wiggles his way onto the page

How do you select weapons for the *Worms* franchise?
Lots of different ways! Sometimes we try and think of a new strategy or tactic that we'd like to bring to the game, and we fit the weapon around that. A good example is the Bunker Buster – we wanted a way of opening up tunnels on the map that players would hide their worms away in, without doing a lot of damage to the worms themselves. Sometimes they come from puns, current events or whatever the designer was into at that moment in time. The Cloned Sheep in *Worms 2* was actually inspired by Dolly the cloned sheep, the story that hit the headlines back in the late-Nineties.

Which *Worms* weapons tend to be the most popular?
In terms of how often they're used in the game, the weapons that do the most damage that are in supply often are the most popular; the Bazooka and Grenade always come out on top. In terms of what people seem to remember, and take to be a big part of the brand, it's the more surreal and humorous weapons. The Banana Bomb, Super Sheep and Holy Hand Grenade are mainstays of the series, they're always fondly spoken of by fans of the series.

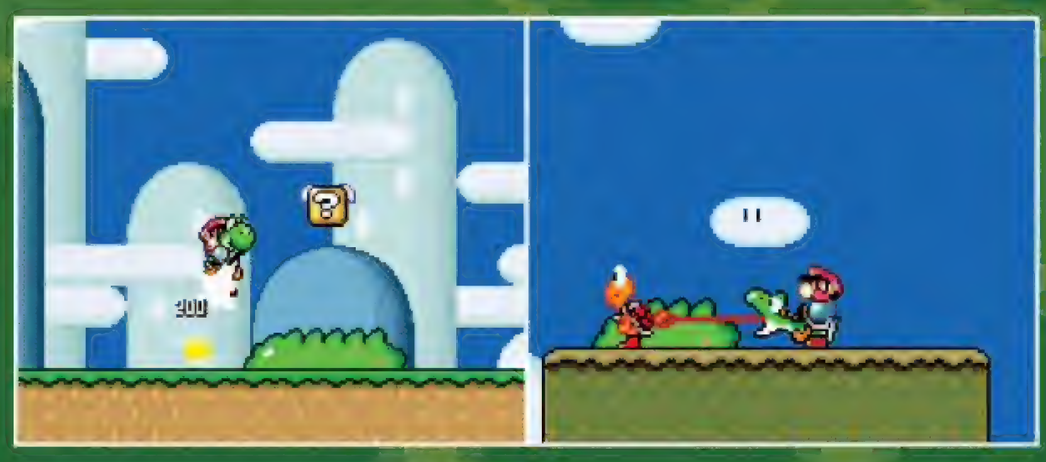
How hard is it to balance weapons and have any been too overpowered?
It is hard to balance the weapons, because the game is so open. There are so many different situations that can arise that it's hard to predict and cater for each one. Sometimes from watching people play or looking at discussions on the forums you find people using the weapons in ways that you never imagined! We do a lot of usability testing, have our own internal QA department and often do closed betas to ensure the weapons are balanced, however.

30 GREATEST WEAPONS EVER!

YOSHI

■ **FIND IT IN:** *Super Mario World*

You might consider Yoshi more of a companion than a weapon, but let's be honest – that dinosaur is a wrecking machine. Not only can he remove threats from Mario's path by simply swallowing them whole, he can spit them back out as deadly fireballs. Not only that, but in later games it turns out he can use his own eggs as weapons, too. He might be the cutest weapon on this list, but don't be fooled – Yoshi is a force to be reckoned with.



> "If you notice, every gun in Doom does not nullify the previous weapon"
>
> John Romero

TOP OF THE SHOTS

The shotgun is a great weapon, but with so many games including it, which do you pick? Here are our top five:

DOOM II: HELL ON EARTH

■ Just listen to that sound! The first *Doom*'s shotgun is good, but the Super Shotgun in *Doom II* is out of this world. If we knew we were going into a close-combat situation, we wouldn't leave home without it.

METAL SLUG X

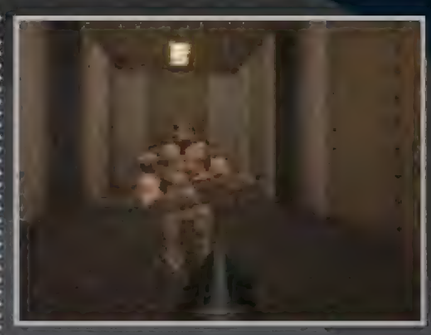
■ For sheer carnage, little beats this highly useful pick-up. Whole rows of enemies will disintegrate after just one high-powered blast! Even powerful tanks will succumb to this little beauty after a few good hits.

RESIDENT EVIL

■ Conserving ammunition is important in *Resident Evil*, which means that the shotgun will quickly become your friend. Who needs to waste pistol bullets when a couple of shells will take down a whole pack of zombies.

WORMS

■ Not only does the *Worms* shotgun have a surprisingly meaty sound effect, it's one of the best utility weapons in the game because you get two shots rather than the standard one. Why settle for shooting once anyway?



QUAKE

■ What can we say? id Software really lovee shotguns, but the beauty of it in *Quake* is that it's not a power-up – you get this bad boy from the start. If you want immediate gratification, this classic has you covered.

LAPTOP GUN

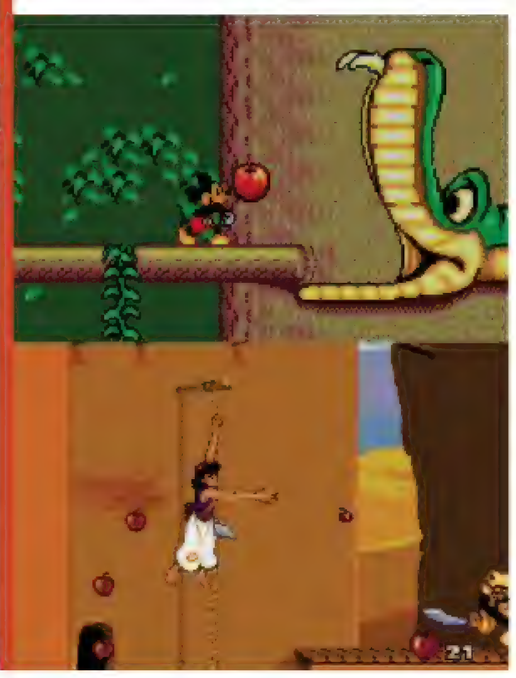
FIND IT IN: *Perfect Dark* series

Spies need cool gadgets, and they don't come much cooler than the Laptop Gun. This concealed weapon is disguised as a laptop PC, albeit one that won't stand up to close scrutiny due to its memory deficiency. No matter, though, as well as being a pretty useful gun in the hands of anyone fortunate enough to carry one, it's an exceptionally useful gun in nobody's hands thanks to the autonomous sentry mode. If it didn't have limited ammunition, you could use this to lock down vital areas indefinitely. An invaluable espionage tool, and an excellent multiplayer trick to boot. Classic.

APPLES

FIND IT IN: *Castle Of Illusion, Aladdin*, etc.

We're not entirely sure why the designers of Disney games were taken with using apples as weaponry – maybe it was the most family-friendly projectile weapon? Either way, there's something excellent about defeating your enemy by lobbing fruit at them. We imagine that it's like pelting a miscreant that has been put in stocks, but with beloved Disney characters.



BLUE SHELL

FIND IT IN: *Mario Kart* series

When you're on the receiving end of a Blue Shell it's truly the most annoying thing in the world – a punishment for your skill, and quite often one that wrecks your chances of winning. But trust us, if you're firing it, it's *bliss*. That swooshing sound, the warning noise you hear as your friend is about to receive their unwanted gift and the ensuing explosion: it's beautiful. But to give you fair warning, your friend *will* want to hit you with a lamp afterwards.

30 GREATEST WEAPONS EVER!

JOHN ROMERO

The Doom and Quake designer weighs in on his favourite weapons

Did you fire any of the available weapons found in *Doom* in real life to get a feel for them?
Yes, definitely. Absolutely. How else would I know how a Plasma Gun or a BFG feels when it goes off? I'm not joking – the little toy guns we bought from Toys-R-Us did have triggers on them and I did fire those guns. Nothing came out, though, except a funny noise. We took those toy guns and scanned them in with a video camera then pixel-edited them into perfection.

Why do you think the shotgun is so satisfying to use?
The massive damage and the sound effect of the blast, monster death, then reload, in that order.

How important is it to ensure each weapon handles differently?
It was very important so it felt that each weapon has a reason for existing and a special purpose that wasn't just more damage. If you notice, every gun in *Doom* does not nullify the previous weapon. You always want the normal shotgun for long distance shots, and the Super Shotgun for up-close shooting. The pistol is great for long distance picking-off, and the chaingun is great for burning ammo and enemies down to nothing. The Plasma Gun is kind of a high-speed mini-BFG.

What's your favourite weapon in a game and why?
In any game? Well, I am partial to the MM1 Grenade Launcher in *Ghost Recon*. I'm also a huge fan of the silent sniper rifles in that game. In other games, I love the Wraithverge in *Hexen* and the Shotcycler-6 in *Daikatana*. *Half-Life* and *Half-Life 2* as well as *Resident Evil* and *Hitman* have awesome Colt 45's. The Railgun is a pretty great invention as well as the Gravity Gun. But I'll go with MM1 in *Ghost Recon*. It makes me laugh.

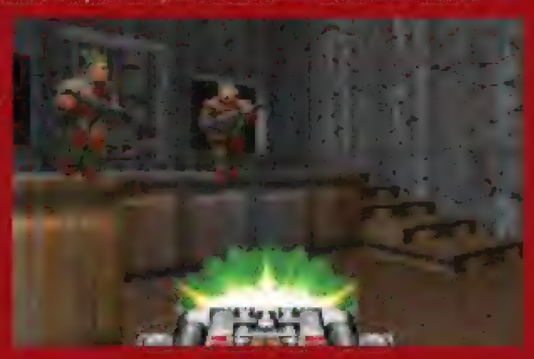
Who came up with the original concept of the BFG?
The BFG concept was Tom Hall's. Originally it shot out a lot of small green and red balls and looked like Christmas. It also slowed the game down a whole lot so we simplified it into the huge green blast you see now – not right this second; we aren't deathmatching!

What's the best weapon id Software has ever created?
It has to be the double-barreled shotgun because it feels *so* satisfying. Second place is the rocket launcher. I think I like Quake's just a little better than *Doom*'s, mostly because it's faster.

BFG 9000

FIND IT IN: *Doom* series

"Death surrounds me. Yet, in my head, I hear something that sounds like angels! Lo, I have found the Holy Grail of firepower!" Those are the words of Doomguy as he happens upon the BFG 9000 in the infamous *Doom* comic – and they're about the only words in the whole comic that make sense. The BFG 9000 isn't just a big gun, it's *the* big gun. When you're taking on everything that Hell can throw at you, the ability to fire off a plasma ball is greatly appreciated, especially because it doesn't cause blast damage like rockets. However, what makes the BFG 9000 really good is the spread of 40 tracer rays that follow the visible blast. You can deal huge damage to a whole room by standing back, or get up close and concentrate the pain on one monster. Either way, with the BFG 9000 on your side you won't be losing any battles in a hurry.



STEVE ELLIS AND DUNCAN BOTWOOD

GoldenEye's developers reflect on the game's guns and gadgets

Why were many of the *GoldenEye* weapons based on real life weapons?
Steve Ellis: Since we were making a realistic game, it seemed to make sense to include real-life weapons, so that's what we did. Real weapons with their real names. However, a couple of months from the end, lawyers got their hands on the game and told us that we couldn't use real weapon names – that would require permission from the manufacturers – so we renamed them all and took the opportunity to fit a few jokes & references in there.
Duncan Botwood: The *Bond* universe is grounded in our own, and the henchmen and allies don't have the equipment which Bond and many of his enemies have access to. In *GoldenEye*, he was facing opponents equipped with Soviet army weapons, and we added regionally appropriate weapons for other locations, and chose more advanced weapons for more interesting characters like Xenia.

How much time was spent testing them?
Steve Ellis: Most of the weapons were implemented from a very early stage, so a lot of time was spent playtesting and balancing them. Certainly more than a year.
Duncan Botwood: We spent considerable time every day playing the game, and the weapons were tweaked by Mark Edmonds starting from their real-life counterparts' specs for range and ammo, and adding our own rough guesses for accuracy. Those were informed by the descriptions of the weapons from a couple of sources. The Skorpion/Klobb, for example, is a SMG designed for tank crews who had restricted space, which as a result suffered from terrible accuracy, and so a legend was born.

Did any weapons not make the final cut?
Steve Ellis: I can't remember any, but it was a long time ago! For weapons it's most likely that if they didn't work well we would have rebalanced them until they did. The things we're more likely to have ditched would be gadgets that were intended to have a special function but we didn't have time to implement it. I seem to remember that we had some of these, but I can't remember the details.
Duncan Botwood: I don't think there were any that we cut out. We had a reasonable spread of types to give variety, and some interesting variants. We were mining through the *Bond* archives to find either cool weapons or gadgets associated with the licence to fill out the roster, but we didn't build too many. More often there was a situation where we had an awesome gadget that we would love to have got into the game but we couldn't think of a way to make it work within the game. The one device that was almost cut was the laser watch but the team got that working, and Dave [Doak] found a great way to use it in a mission (cutting the trapdoor in the train against a timer).

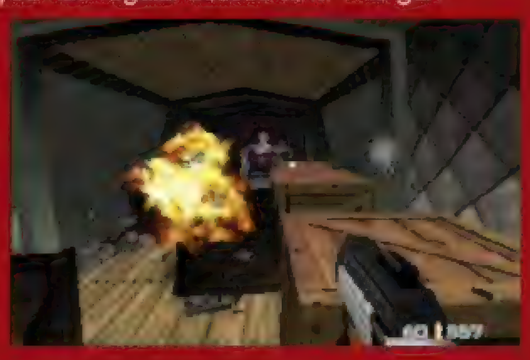
Why is it so important to balance weapons in games like *GoldenEye*?
Steve Ellis: If one weapon is the best weapon in the game it becomes the only weapon that anyone wants. If the weapons each have their strengths and weaknesses, there is much more fun to be had from playing using different weapon sets, and the player with the best weapon doesn't automatically win, so we varied a whole range of weapon parameters, such as fire-rate, clip size, accuracy and damage dealt.
Duncan Botwood: Weapon balance is important in any game. If any one thing is overpowered it has a ripple effect and impacts the player's enjoyment. We were aided in *GoldenEye* by the real-life weapons. I think off the top of my head the most numerous type were pistols, then submachine guns; I tried to pick weapons that were both different enough between similar weapons of their type and yet still appropriate for their location in the game.

RC-P90

FIND IT IN: *GoldenEye 007*

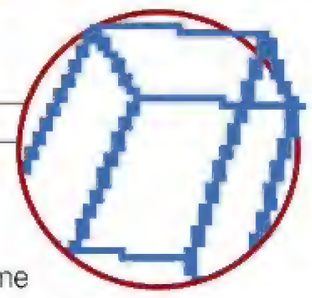
You don't often get to use this amazing piece of weaponry in *GoldenEye*'s single-player missions, and with good reason: the game would just prove far too easy if you had regular access to it. This gun just has everything you could ever want from it – excellent accuracy, generous magazine size, a fantastic firing-rate and the capacity to inflict major damage.

What makes the gun stand out is that in a game where most guns are balanced well enough to be generally useful and almost all of them are situationally good, the RC-P90 is just that bit better in most situations. Some players even consider it to be *too* powerful. Best not tell them about the cheat that gives you an RC-P90 in each hand, eh?

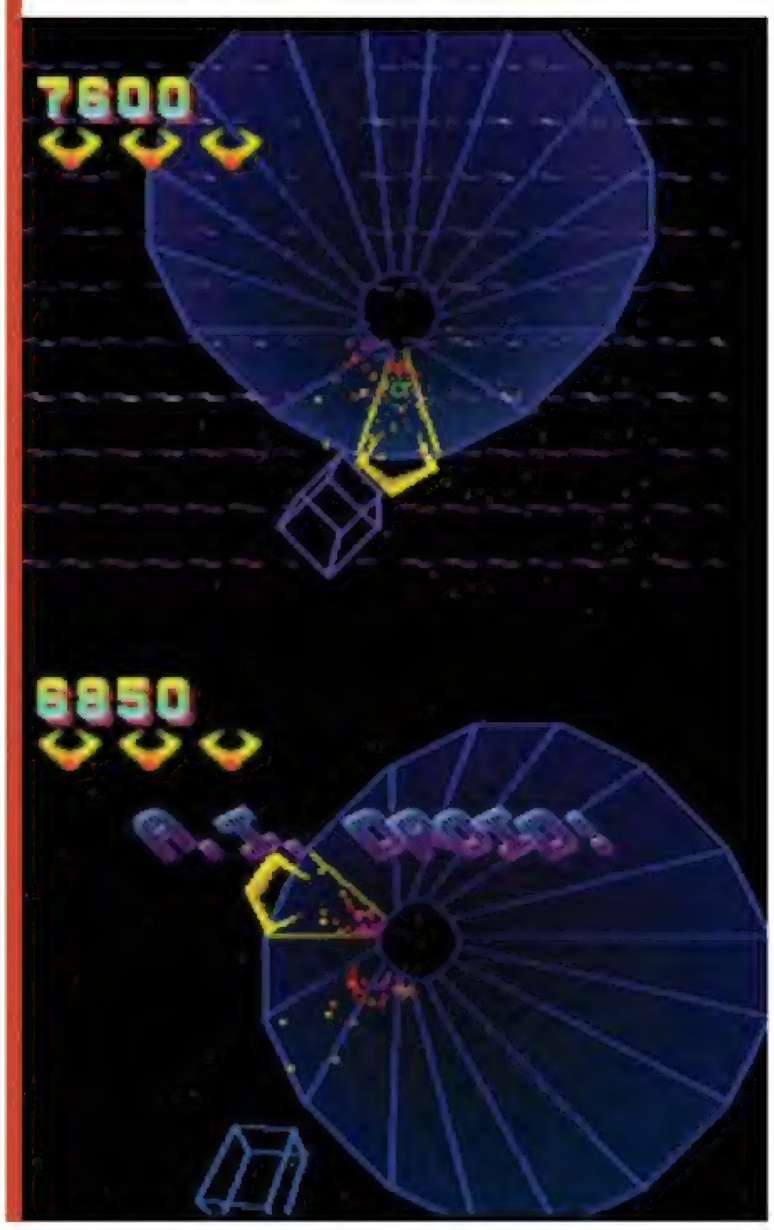


AI DROID

FIND IT IN: *Tempest 2000*



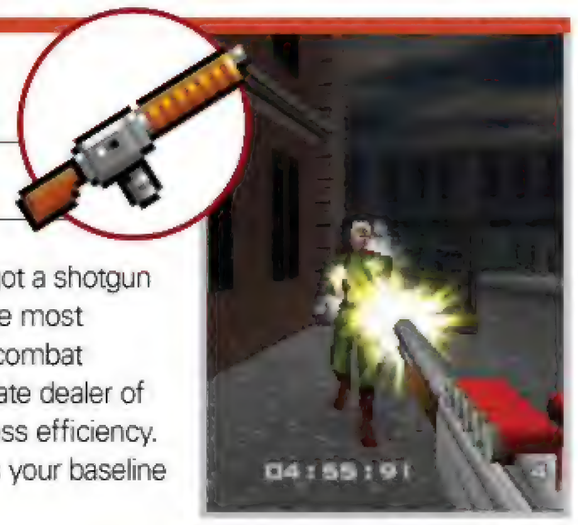
If there's one thing that can help you in the frantic mess that is the average *Tempest 2000* screen, it is some artificial intelligence – something that can cut through the audiovisual assault that distracts us mere mortals and lend some much-needed assistance. Thankfully, *Tempest 2000*'s AI Droid does just that, providing some autonomous back-up fire that will get you out of the frequent tight spots you'll encounter.



LIGHTSABER

FIND IT IN: *Star Wars* series

You might not think of videogames immediately when you picture a Lightsaber, and we can understand that. But let's be honest: when we pick up a *Star Wars* game, using a Lightsaber is one of our top priorities. Of all the Lightsaber battles, we're particularly taken with the ones that appeared in *Star Wars Trilogy Arcade*, which allowed you to take on Boba Fett as well as Darth Vader.



SHOTGUN

FIND IT IN: *Worms*, *Doom*, *Resident Evil*, and just about everything else

Who cares about subtlety when you've got a shotgun at your disposal? While it might not be the most effective weapon at long range, in close combat situations you will become an indiscriminate dealer of death, blowing enemies away with ruthless efficiency. Ammo is usually everywhere, too. This is your baseline awesome weapon. Treat it with care.

SOUL EDGE

FIND IT IN: Soul Calibur series

They say that power corrupts, and absolute power corrupts absolutely – and Soul Edge is the proof. This legendary sword grants its user immense power and thanks to its ability to shapeshift, any swordsman can use it. However, while many desire to use this demonic sword the few who take possession of it tend to find *it* using *them*, as it consumes their souls and drives them insane. While it was first seen as twin swords in Cervantes' possession, it's Nightmare's version that remains the most memorable, appearing as a flesh-covered blade bearing a giant eyeball.

BUSTER SWORD

FIND IT IN: *Final Fantasy VII* series

Sometimes, a weapon doesn't need to be useful or even practical to stick in the minds of players – and Cloud Strife's signature weapon is certainly neither. As his basic weapon it is abandoned early in the game for more powerful options, and as a real sword it would be night impossible to use. But that iconic shape – the absurd size and the angular design, in particular – means that the Buster Sword is impossible to mistake for anything else. It also provides a neat design contrast with the antagonist Sephiroth, who utilises the equally iconic Masamune, a thin and elegant blade.

ColecoVision

» **MANUFACTURER:** Coleco » **YEAR:** August 1982
» **COST:** $199 (US launch), £149 (UK launch), £70+ (UK today)

Having experienced success with a *Pong* clone and dedicated handheld games, Coleco's next move was to enter the growing console market – and few consoles have come roaring out of the gate quite like the ColecoVision. Not only did it arrive to market before its competitors, allowing the machine a few months to build momentum, but it launched at an attractive price point. Even better, Coleco had scored a major coup in securing *Donkey Kong* as its pack-in game, giving the machine a big hitter to call its own. By Christmas of 1982 it had already sold half a million units, and passed the one million mark early in 1983.

By the time CBS Electronics brought the ColecoVision to Europe in mid-1983, the system looked to be a fixture of the market. However, its momentum was slowed when the North American videogame crash took effect and the machine was ultimately discontinued in 1985. Despite its short lifespan, the ColecoVision remains an attractive machine for players worldwide thanks to its high quality conversions of beloved Eighties arcade games. In recent years AtGames has revived the system with the ColecoVision Flashback plug and play console, giving players another chance to play this classic console.

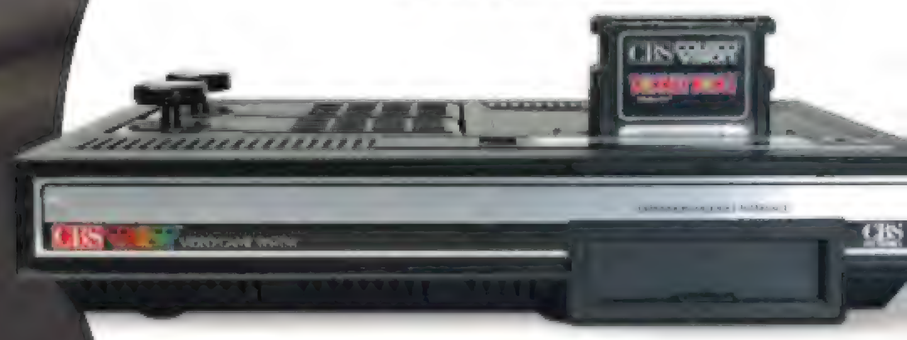
ESSENTIAL GAME

Donkey Kong

Few games are as iconic of early Eighties arcade gaming as Nintendo's *Donkey Kong*, and Coleco's exclusive licence to produce console versions of the game enabled it to boast a major exclusive for its first Christmas, and one which immediately demonstrated its new console's advanced graphical capabilities. While it's a very good conversion, it doesn't include the cement factory stage. Then again, most console versions didn't – even Nintendo's own NES version. It's a common game thanks to its pack-in status and one that is arguably essential to understanding the appeal of the console, so it's well worth owning a copy.

Hardware fact

■ The first ColecoVision expansion module gave the system backwards compatibility with the Atari 2600 – an incredibly bold move that paid off handsomely, leaving the Atari 5200 to play catch-up.



RAM: 1KB MAIN, 16KB VIDEO

PROCESSOR: UZ80A (3.58MHZ)

OPERATING SYSTEM: 8KB COLECOVISION BIOS ROM

FORMAT: CARTRIDGE

TOTAL SOLD: 2 MILLION+

JUMPING JACK

Jumping Jack is quick and bold
With skill his story will unfold
Martyn Carroll talks to Albert Ball
About the game that charmed them all

» [ZX Spectrum] *Jumping Jack* was renamed on other machines due to a naming rights issue.

JUMPING JACK 101

■ Daring Jack must make it to the top of each screen by carefully jumping though the moving gaps. On the opening screen of the game it's just Jack and the platforms, but on subsequent levels more and more enemies join the fray, adding to the challenge. There are actually 21 levels in total, not 20 as mentioned on the game's inlay!

Albert Ball is not one of the famous Imagine Software alumni. Many of the individuals involved with the Liverpool-based company went on to bigger and better things following its humiliating collapse in July 1984. People like Eugene Evans, John Gibson, Ally Noble and even marketeer Bruce Everiss have carved out successful careers in the gaming industry. Albert, meanwhile, is best remembered for his debut game *Jumping Jack*, and has never been interviewed about his work. That's an oversight that clearly needs correcting, particularly as *Jumping Jack* is surely Imagine's best game – a simple, hugely playable and downright charming arcade title that's the very antithesis of the flashy Megagames that contributed to the company's demise.

Albert lived close to Liverpool in a village called Lowton, but he wasn't one of the in-house Imagineers. He had no background in computing and worked full-time as an electrical engineer, having gained a degree in engineering from the University of Salford in 1968. So Albert was in his mid-thirties when news of the ZX Spectrum first began to circulate. "I saw the blurb from Sinclair and thought it sounded fantastic," he says. "I ordered one straight away, but as you probably know, Sinclair used the proceeds to continue developing the damn thing! It was about six months after I paid for it that I finally got it. It was so frustrating."

» [ZX Spectrum] In a neat touch Jack can run behind the on-screen scores and lives counter.

That frustration is long gone now, as Albert reflects on the time with plenty of humour – and more than a little surprise that he's talking about *Jumping Jack* after all these years. But when his Spectrum finally arrived in late 1982 it was no laughing matter – particularly for his family. "I became very unsociable once I got the Spectrum," he reveals. "I taught myself to program and wrote odd bits in Sinclair Basic. I then got the data sheet for the Z80 and got familiar with all of the machine code instructions, and realised you could do a lot more at that level. It took me over completely and I was enthralled by it. I had a full-time job and I was programming in the evenings. I got into a lot of trouble with the family for devoting all of my attention to it."

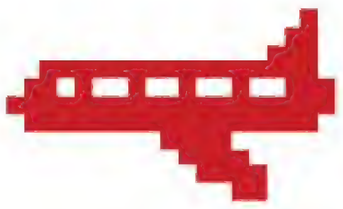
Albert's painstaking method of programming ensured that plenty of midnight oil was burnt. "I wrote *Jumping Jack* by actually poking the machine code directly into memory locations. I'd enter each subroutine and then leave a gap in case they expanded, which they usually did. Of course, I ran out of space so had to re-poke the whole damn thing in. After I finished the game someone said to me: 'Which assembler did you use?' I didn't know what an assembler was. When I found out it blew me away. Good God, I thought, it's magic! It does the programming for you!"

All that poking around resulted in *Jumping Jack*, an arcade game with a deceptively simple objective – guide stickman Jack to the top of the screen

by jumping through the moving gaps in the platforms. However, if you mistimed your jump and banged your head, or were hit by one of the moving 'hazards', you'd be briefly knocked unconscious and, most likely, swallowed by the moving gaps. It was a bit like *Snakes And Ladders*, where you'd climb to the top only to hit a 'snake' and thud, thud, thud down to the bottom again. But this was no game of pure luck: if you messed up it was your own fault, hence why reaching the top of the screen was so compulsive.

"I can't remember exactly what gave me the idea for *Jumping Jack*," admits Albert when asked about the game's origins. "I never really played other people's games as my interest was in the programming. A platform game just seemed like a simple and obvious thing to do. I started to code it up in stages and thought that it looked like a reasonable game. I then got my son, Stuart, who was only ten at the time but very keen on art, to draw up some graphics for it. He got some squared graph paper and started designing the graphics – Jack

» [ZX Spectrum] The game becomes much more frantic when multiple hazards arrive on the screen.



running, jumping and falling over, and the hazards like the little bus and train and so on. He did an excellent job. I wouldn't have had the patience to do all that."

It you thought that the graphics were a little simplistic then now you know why. Stuart's doodles definitely had a certain charm about them, though, and the young Ball also fulfilled the role of target group playtester. "Initially I designed it to have ten levels as I could only get up to level five or six," says Albert, "Stuart was very nimble-fingered and he cracked it in no time. I was ▶

"I became very unsociable once I got the Spectrum... I was absolutely enthralled by it"

Albert Ball

JACK STACKED UP

How the three versions of the game compare

SPECTRUM

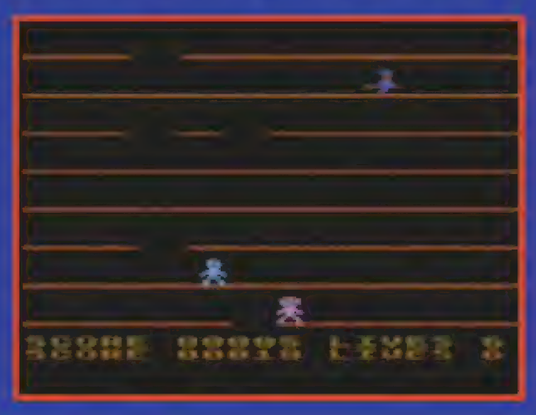
AUTHOR: Albert Ball

■ The classic original. The graphics are basic and the sound is minimal but the playability cannot be faulted. You run and jump and crash and fall – it's incredibly frustrating but at the same time it's difficult to stop playing. Easily one of the top five 16K Spectrum games.

DRAGON 32

AUTHOR: Roy Lowry

■ The Dragon version is very close to the Spectrum game, with all of the levels and hazards. It plays just as well, too, and is perhaps a touch easier due to the slightly slower speed of the gaps. Sadly the rhyme is missing but that doesn't affect the gameplay, of course.



ATARI 8-BIT

AUTHOR: Roy Gibson

■ The Atari version is a bit of a revelation, in that it includes a simultaneous two-player mode where you race to be the first one to the top of the screen. If you bump into each other you both fall! Movement is silky smooth and overall this is an excellent update of the original.

IN THE KNOW

» **PUBLISHER:** IMAGINE SOFTWARE

» **DEVELOPER:** Albert Ball

» **RELEASED:** 1983

» **PLATFORM:** Spectrum, Dragon, Atari 8-bit

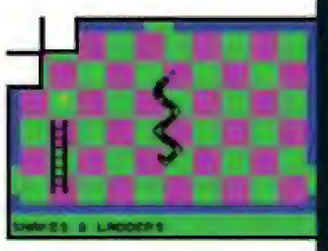
» **PLATFORM:** Platform

» [ZX Spectrum] Proud dad Albert Ball with son Stuart who designed the graphics for *Jumping Jack*.

» [ZX Spectrum] "It's a madhouse!" Albert sums up the later levels perfectly.

» [ZX Spectrum] Every time you jump up a level, another gap opens up elsewhere.

» [ZX Spectrum] Run down by a speeding train. This is not going to end well.



DEVELOPER HIGHLIGHTS

JUMPING JACK
SYSTEM: Spectrum, Dragon, Atari 8-bit
YEAR: 1983

RAPSCALLION
(PICTURED)
SYSTEM: Spectrum
YEAR: 1984

MASTERSPY
SYSTEM: Spectrum, PC
YEAR: 1987

▶ worried that it might be too easy and it occurred to me that I could double the number of levels and hazards. Whether anybody completed it I don't know."

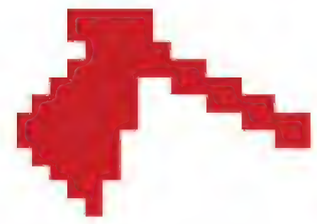
Any determined souls that did manage to finish the game were rewarded with the final line of a rhyme which was revealed, a couplet at a time, after each level. "I put the rhyme on afterwards as I thought the player deserved some kind of reward for getting to the top of each screen."

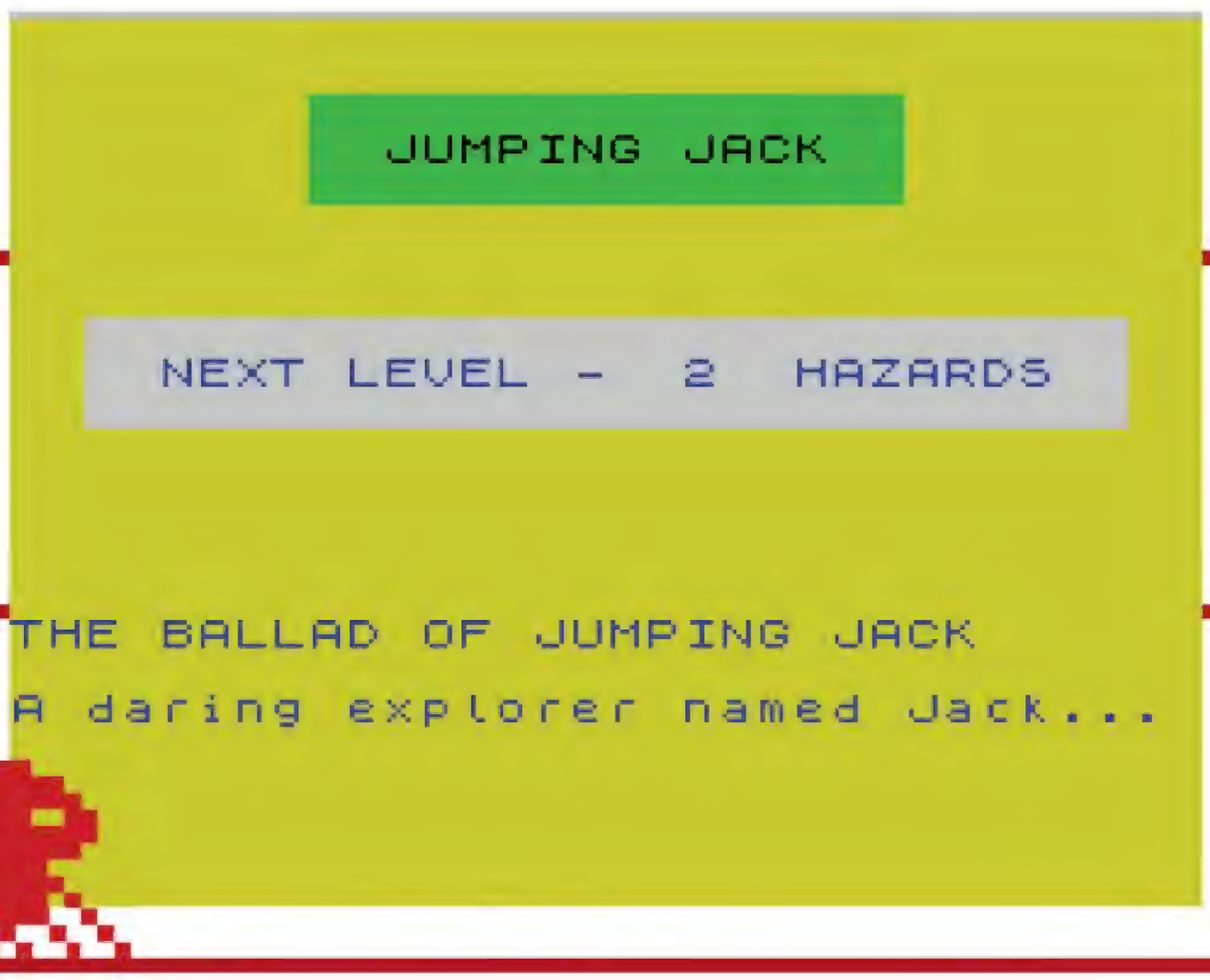
After two months of work *Jumping Jack* was complete. The game occupied precisely 8,818 bytes of memory, meaning that it would run on the entry level 16K Spectrum. The next step was for Albert to attract a publisher. "I sent it off to four or five software houses including Imagine, Bug-Byte and Virgin Games. I just put a tape in an envelope with a letter saying: 'If you're interested make me an offer.' The next thing I knew I was at work and I got a phone call from my wife to say that some people from Imagine had come over to the house. They actually turned up on the doorstep. It turned out that a computer fair was being held in London the next week and Imagine wanted to sign it up right away.

"I went up to Liverpool to see them. I really wanted a royalty deal but Imagine had no means of giving royalties at that time, so it offered to buy the game for a cash payment of £2,000. I hadn't got a clue what it was worth really. I got it up to £3,000, which was a decent lump of money to have at that time. I thought afterwards, when the game took off, that if I'd gone for royalties I would have done really well. Still, I bought a 48K Spectrum out of the proceeds – and I got myself an assembler as well! I also bought the kids new bikes and told them they were presents from *Jumping Jack*."

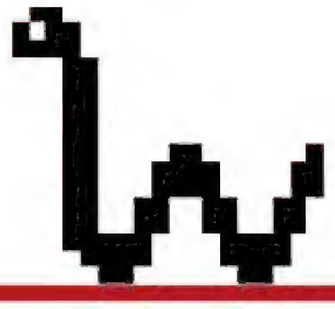
"I bought the kids new bikes and told them they were presents from Jumping Jack"
Albert Ball

The game was released in July 1983. Steve Blower was commissioned to produce a comedic cover illustration and the game retailed for Imagine's usual price of £5.50. Glowing reviews soon followed, with *Home Computing Weekly* and *Popular Computing Weekly* awarding the game 5/5 and 10/10 respectively. *Crash* magazine called it, "quite simply one of the most addictive games around and excellent value for money." Sales were notable too, with the game climbing into the multi-format top ten chart in November 1983 alongside heavyweight hits like *Jet-Pac*, *Manic Miner* and Imagine's own *Zzoom*.





» [ZX Spectrum] Lines of a rhyme are revealed between each stage, rewarding players for their progress.



Having agreed to purchase the game outright, Imagine ported it to the Dragon and Atari 8-bit without Albert's involvement (a Commodore 64 version was also mooted but never materialised). For these machines the game was renamed *Leggit* and the character of Jumping Jack became Leaping Lenny. It transpired that Imagine was forced to change the name because a *Frogger* clone called *Jumpin' Jack* had previously been released for the VIC-20.

Buoyed by the game's success, Albert began working on his second title, an arcade maze game called *Rapscallion*. This took the best part of a year to develop and was due to be published by Imagine, but the firm's woes were about to be laid bare. "A guy at work showed me a magazine article about Imagine and its financial difficulties. It was a bit a shock! So I decided to take the game to various other places and eventually did a deal with Bug-Byte."

A narrow escape, yet it wasn't all plain sailing with Bug-Byte. "I did struggle," says Albert. "I sold it for royalties and I was supposed to be paid every three months, and it got to more than six months before I was paid anything. I kept writing letters and ringing up, and eventually I had to take legal action. It was sad I had to do that. In total I got just over £5,000 for the game."

» [C16] Leaper, published by Argus Press for the C16 and Atari 8-bit, was a rather blatant copy of *Jumping Jack*.

The market was changing. Bug-Byte was liquidated soon after and Albert struggled to gain any interest in his third game, *Masterspy*. "It was an espionage adventure where you had to solve a series of intricate puzzles to sniff out a mole. I was working on it for years and things had moved on by the time it was finished and there were no takers. A guy from a software company did ring me up and said he thought the game was really fantastic and he'd like to make me an offer, but he'd have to put it before his panel of reviewers first. Sadly the reviewers' verdict was that the game was too complicated."

Undeterred Albert created a PC version of *Masterspy* (which ultimately ended up on a PC Plus coverdisk), but his days as a hobbyist game developer were at an end. He has continued to code however, and in recent years created a railway simulator for Windows that allows train enthusiasts to build and operate their own railways. Looking back he is rightfully proud of *Jumping Jack* and has fond memories of that period in his life, when he enlisted the help of his young son to create an enduring classic in the family home.

"The whole thing was quite extraordinary," he says. "It was like a cottage industry at that time, with people just like me actually developing a game on a stock 16K Spectrum on which it would be played. I had no idea *Jumping Jack* was going to be so popular. I still come across people today who played the game as children, or their children played it, and it's very nice to hear that sort of thing; to know that people enjoyed it and got hours of pleasure out of it. That's the real payoff, realy. And, to me, that's worth way more than money." ✱

MORE IMAGINE HITS

Five games that were a clear cut above

ARCADIA 1982

■ The game on which Imagine was founded brought arcade shooting thrills into the home. It was quickly superseded but at the time of release it was hugely impressive and very popular. The VIC-20 version (pictured here) is more playable than the later C64 release.

WACKY WAITERS 1982

■ Imagine released many titles for the VIC-20 and this title from Eugene Evans is the best. Negotiating lethal lifts to deliver drinks is far from simple, but it has that quality that drags you back for more. Eugene's *Catcha Snatcha* is also good fun.

ZZOOM 1983

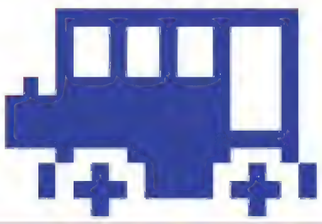
■ This Spectrum favourite from John Gibson features a sim-style plane control panel, but it's actually a straightforward shooter in which you protect refugees from enemy forces. It's the little details that make it memorable, often involving innocents meeting unfortunate ends.

ALCHEMIST 1984

■ This graphic adventure for the Spectrum features a wizard who transforms into an eagle, allowing access to otherwise inaccessible areas of a castle. While the game suffers from jerky scrolling, it's still an enjoyable quest.

BC BILL 1984

■ One of the final games to be released by Imagine, *BC Bill* sees you playing as a caveman who survives by hunting women and gathering food. Featuring good cartoon graphics, this silly romp was released for the Spectrum, Commodore 64, Dragon 32 and BBC Micro (pictured).



10 PRINT "CODING
BACK THE YEARS"
20 GOTO 10
RUN
TX
VOLUME
BRIGHTNESS
CONTRAST
COLOUR
commodore 64

Coding Back The Years

For many it's a just a job; for others it's a platform to other careers. But for some it's a calling, and one they're still enjoying. From the Eighties to the present day, Graeme Mason speaks to those who, after all these years, are still at work crafting videogames...

Code. It's behind every videogame character, every item, every boss, every pixel-perfect jump and every laser shot. 35 years ago, each facet of a game's development would be covered by the coder themselves; graphics, sound and game design would all be within their remit. But times have changed since the birth of the industry. Today, with huge teams numbering in the hundreds often dedicated to producing one triple-A title, it's a different world from the bedroom coders of the Eighties.

In The Beginning

"I was an electronics engineer in the music business in the Seventies! Yes, I'm that old," laughs David Looker, founder of DJL Games and author of one of Atari's first official home conversions, *Pac-Man*. "And I increasingly found that keyboards and other equipment were going digital, so I decided to learn as much as I could about the technology. I saw *Space Invaders* running on a Commodore PET, which encouraged me to build a ZX81 and I started to learn programming in BASIC." David's route to coding was an unusual one among our coders, most of whom are – apologies David – a little younger. By 1969, Steve Turner, of Graftgold fame, was attending a computer club at school. "We learned ALGOL and typed our programs onto punched tape," he recalls. "It felt cool feeding the tape into the machine, which had a core memory of 1K." The results of Steve's efforts would then spin out on another punched tape which was fed into a teletype to finally obtain a printout. "I was hooked from the start," he continues, "and later when I was unemployed, I went on a government-sponsored computer course to learn COBOL." Nick Jones, who would go on to become a prolific coder for the Commodore 64, found himself in the industry almost by accident. "I fancied being an architect and was doing technical drawing," says Nick. "A friend mentioned that having computer experience would be beneficial so I chose to study computer science at school." Like Steve Turner, Nick's first experience was with a screenless computer that rolled ▶

JAS AUSTIN

AGE: 00110001

FIRST SYSTEM:
ZX Spectrum

FIRST GAME:
Vic Lix (Vic 20)

FIRST PUBLISHED GAME:
Bunny (ZX Spectrum)

FAVOURITE CONSOLE/ COMPUTER TO DEVELOP FOR:
ZX Spectrum

CAREER HIGHLIGHT:
So many...seeing that first game on a shelf and working with fantastic people are big highlights.

CURRENTLY MAKING:
I'm working on a new and original adventure/puzzle game involving time travel for Origin8.

CODING TIMELINE

From ALGOL to C++, we take you through the big moments in coding history

10
20

{1957}

/ FORTRAN (FORmula TRANslating System) is developed by IBM, despite computers remaining unobtainable to most people. /

30
40

{1958}

/ First appearance of ALGOL, a popular high-level programming language. /

50

/ Lisp becomes the favoured high-level language for AI experiments. /

60

{1959}

70

/ COBOL (Common Business-Orientated Language) is the last of the four high-level languages to appear in the decade. /

80

{1962}

90

/ Simula, which was to have a direct influence on C++, is created in Oslo. /

100
110

{1964}

/ Beginner's All-purpose Symbolic Instruction Code (BASIC), is created and becomes influential. /

120
130

{1970}

/ Highly influential procedural language Pascal is published by Niklaus Wirth. /

140
150

{1971}

/ The creation of the first micro-processor precedes an age where computers become smaller and more accessible. /

160
170

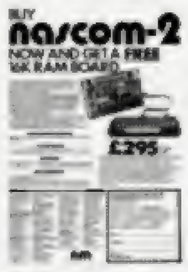
{1972}

/ Dennis Ritchie first reveals his general-purpose language known simply as C. /

180
190

{1977}

/ The first of the Nascom computers is introduced in the UK. /



200

/ The Tandy TRS-80 line first appears and is often used as an early development machine, rivalling the Apple line. /

210
220

{1978}

/ Research Machines' RML-380Z is sold into many schools and universities thanks to a government grant. /

» Jas Austin's Creative Reality. From left, Neil Dodwell, Dave Dew and Jas Austin. Nice mullet.

JIM BAGLEY

AGE: 46

FIRST SYSTEM: ZX Spectrum

FIRST GAME: Unnamed scrolling car game (Sharp MZ80k)

FIRST PUBLISHED GAME: *Throne Of Fire* (ZX Spectrum)

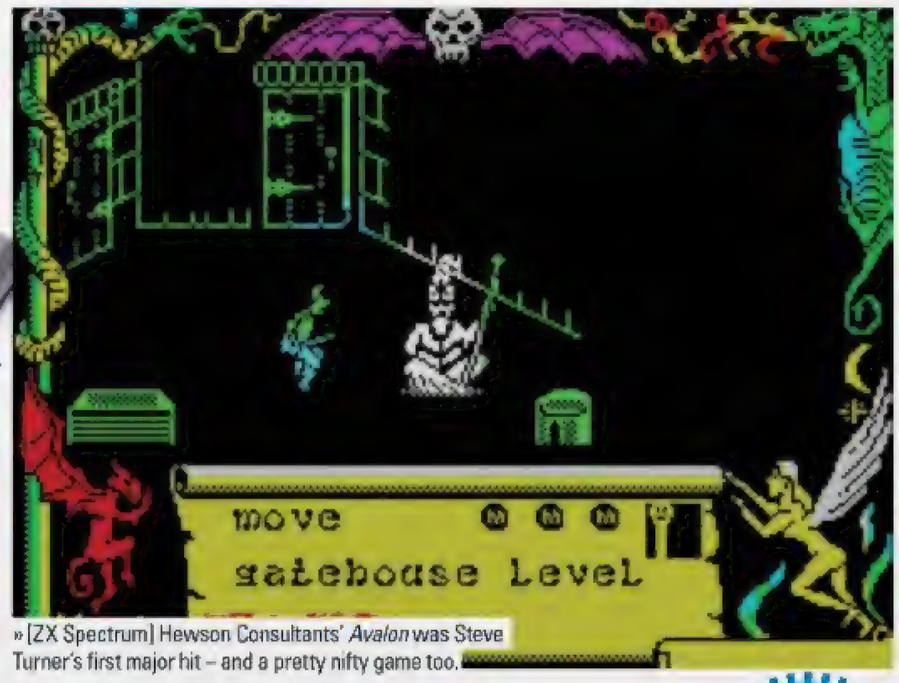
FAVOURITE CONSOLE/ COMPUTER TO DEVELOP FOR: ZX Spectrum

CAREER HIGHLIGHT: I have two: a number one hit with *Road Runner* and making a port of *Doom*, although that also could be considered a lowlight!

CURRENTLY MAKING: Another conversion of *Dragon's Lair*, this time for the Acorn Atom.

▶ off easily-breakable tape. "I hated it initially," he laughs, "as all the output was via typewriter paper and you could only 'save' your programs by having them printed out on paper tape."

Also similar to Steve, Jim Bagley, felt the first stirrings of coding in a computer club. "When I went to high school, they had a small collection of computers: a 380z Research Machine, six Sharp MZ80k machines and a BBC Micro Model B," he says. With the latter proving the most popular, Jim began exploring the Sharp machines and making his own BASIC games, soon coding his own version of *Pac-Man* to play while he waited for his turn on the BBC Micro. Jas Austin, who has impressive Spectrum hits such as *Nemesis The Warlock*, *Slaine* and *Rex* on his resume, nurtured his love of computers via a slightly different route, before developing it at one of the UK's computer clubs. "For me it started when I picked up a Sinclair programmable calculator," he tells us. "It had a very basic set of commands that you could program in and run. It came with a book of programs and even though it was all played on a numeric calculator display, I found it fascinating. But my passion for computing really took off at a school computer club where they had a number of machines including a PET, Vic 20 and BBC Micro." Steve Wetherill, who has enjoyed a career taking in developers such as Software Projects, Odin Computer Graphics and Westwood Studios, had a keen interest in electronics. "I went to Manchester University to study electronics, but became more interested in computers while there," he tells us. "We had a RML-380Z at school, but I was not able to benefit from the new computer class because a quorum of five people was needed, and only two or three were interested. I don't think I was ever allowed to see it, let alone use it!"



» [ZX Spectrum] Hewson Consultants' *Avalon* was Steve Turner's first major hit – and a pretty nifty game too.

Initial DaBBlings

David Looker's first game was called *Sub Chase* which appeared as a *Sinclair User* type-in program. Jas Austin created *Vic Lix* on his school's Vic 20, a game that involved "thrusting a ship up the screen to dock with a mothership while dodging rows of asteroids." Steve Turner gave up on his freshman ZX81 program when it ran out of memory and, as we know, Jim Bagley produced his own version of *Pac-Man*. Of course, by today's standards these early efforts don't stand up particularly well, but an understanding of the relatively unparalleled level of interaction that computer games offered, reveals the true story. "Just being able to control what was on the screen was amazing," recalls Jim, "and since I loved arcade games, having the potential to make them at home was a buzz." Jim's point is reinforced when you consider that by the early Eighties, even remote controls were hardly commonplace.

So, an interest in technology and an inquisitive mind seems to be a prerequisite of a programmer, at least back then. When we ask veteran coder John Gibson (Imagine and latterly, Sony) how he got started in programming he simply says: "I bought myself a ZX81 and a book entitled *How To Write Machine Code On Your ZX81*." Early

DAVID LOOKER

AGE: 73
FIRST SYSTEM: Sinclair ZX81
FIRST GAME: *Sub Chase* (ZX Spectrum magazine type-in)
FIRST PUBLISHED GAME: *Zuckman* (Sinclair ZX81)
FAVOURITE CONSOLE/COMPUTER TO DEVELOP FOR: Sega Mega Drive closely followed by PlayStation 2.
CAREER HIGHLIGHT: There have been so many I can't really pick a single one.
CURRENTLY MAKING: Server code for an unannounced MMO for Slightly Mad Studios.

machines such as these brought their own legion of problems that needed to be worked around. "For me the biggest issue with the ZX81 was the instability of the 16k RAM pack," remembers John painfully. "If you pressed too hard on the keyboard it could become disconnected and you'd lose all your work. It was also nigh on impossible to save and reload your program, so every time you wanted to play your game, you had to type it all in again." For his first game, *Fly In A Bottle*, the player controlled a jam jar with the objective to chase and catch a fly that was buzzing around the screen. "It was written in machine code. You couldn't write games in high level languages in those days," says John. "I wrote the instructions down on a piece of paper and alongside them the hexadecimal opcodes. I then typed the codes into a basic REM statement on the ZX81. Finally, I ran a program that executed the REM statement." David Looker shares John's pain with the primitive home computer. "Machine code programming on the ZX81 was tedious. And the other limitation was the 1k of memory on the original machine." Mev Dinc, creator of cult hit *Gerry The Germ* remembers: "We were discovering and learning, and this is what made it truly fascinating. I experimented all the time to achieve better performance, and this helped me get the best out of the hardware. We just accepted what we had and did our best."

> **"I did everything myself at first: programming, graphics, level design, music and tape mastering"**
> Nick Jones

The Dawn Of The Team

With most coders handling all aspects of a game's creation, development could be an onerous task. But it was quickly changing. "I initially worked on my own, doing the code, graphics and sound," says John Gibson. 6502 coder Nick Jones says, "I did everything myself at first: programming, art, graphics, level design, music, sound effects and tape mastering. But *Cybernoid* on the C64 was the first time I used an artist. It was a major shift for me." Steve Wetherill spent just over a year as a colleague of one of the most famous 'one-man' coders. "At Software Projects, things were really still in the realm of one-man-shop, or the Matthew Smith model. My first work there were converting *Manic Miner* and *Jet Set Willy* to the Amstrad CPC." By the time Steve moved to Odin Computer Graphics in 1985, a regular cadre of artists and musicians were involved in each game. Steve Turner says, "I used to do nearly everything myself with Andrew Braybrook sometimes doing a little bit such as the font. Soon, it was important to specialise and I would be part of a team including artists, musicians and other programmers. At Graftgold, the basic core of any original program would be a lead artist working closely with a programmer, and the rest of the team giving support." Throughout the Eighties, change came to not only the size of the teams, but also the way games were coded. "While the Spectrum itself didn't change that much in the decade," says Jas Austin, "the old set-up of Spectrum and tape player was painfully slow, although that did force me to 'code smart' as it would take upward of half an hour to find errors or bugs in the code." Jas moved onto Sinclair Microdrives – theoretically an upgrade, but not always reliable – and saw an improvement in assembly time. Additionally, development computers became increasingly-used by the mid-to-late-Eighties in order to save programmers time and frayed nerves. Jas used a ▶

» [Amstrad] Steve Wetherill's first commercial game, the Amstrad CPC conversion of *Manic Miner*.

» [ZX Spectrum] John Gibson's commercial bow was the teeth-tastic *Molar Maul* for Imagine.

» Map designing, Eighties-style. This is for *Nemesis The Warlock*.

» John Gibson (far right) looks surprised at the efforts of his fellow Imagine coders.

STEVE TURNER

AGE: 61
FIRST SYSTEM: Sinclair ZX80
FIRST GAME: *3D Space Wars* (ZX Spectrum)
FIRST PUBLISHED GAME: *3D Space Wars* (ZX Spectrum)
FAVOURITE CONSOLE/COMPUTER TO DEVELOP FOR: Commodore Amiga
CAREER HIGHLIGHT: When I finished *Avalon* I knew I had broken new ground and then Andrew's Paradroid became a hit. We felt on top of the world.
CURRENTLY MAKING: *Deepest Blue*, a game inspired by *3D Space Wars*. Follow its development at graftgold.blogspot.co.uk.

{1979}

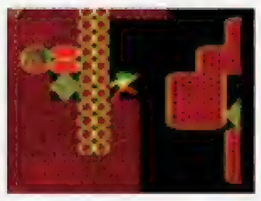
/ Introduced this year was the Motorola 68000 microprocessor which initially be commonly used in arcade machines. /

{1980}

/ HiSoft Systems is formed by David Link. It would go on to create many popular programming tools. /

*/ Atari's arcade machine *Battlezone* pushes gaming into 3D thanks to some innovative coding. /*

{1981}



/ The BBC Micro debuts and becomes a common sight in schools all over the UK, opening many young minds to videogames./

/ The first IBM PC is sold, creating a standard of compatibles which would often be used for games development in the Eighties./

{1982}

/ The mighty ZX Spectrum is unleashed by Sinclair and soon becomes a popular games machine, attracting many would-be programmers./

{1983}

/ C++, invented by Bjarne Stroustrup, first appears./

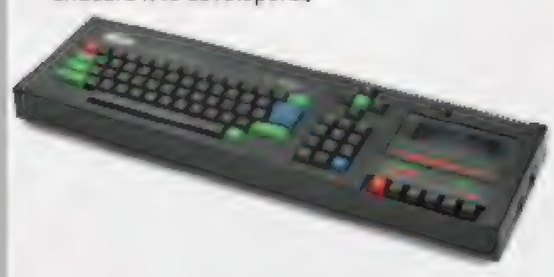
/ HiSoft's DevPac becomes a popular assembler for the ZX Spectrum./

/ Crystal Computing releases Zeus, a Z80 assembler for the Nascom 2, and latterly, ZX Spectrum – which comfortably outperforms its peers./

/ The Sage IV is released and is the fastest home computer system of its time. It's commonly used for videogame development, but costs a huge £7000./

{1984}

/ Amstrad releases its CPC range of computers. The addition of a floppy disc drive endears it to developers./



» [ZX Spectrum] John Gibson's *Stonkers* was original and compelling real-time wargame.

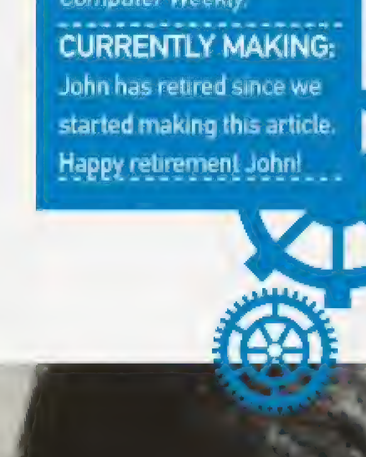
▶ PDS Development system, a PC-style computer running the assembler and editor with a hardware interface to the ZX Spectrum. "I recall the first time I ran it – it assembled and downloaded the code in seconds! It was so fast I couldn't believe it had worked."

As Jas touches upon above, one of the main menaces from the early days was discovering and eliminating bugs in code. Both tedious and time-consuming, it induces a pained expression from the majority of our coders. "When I started debugging, it meant looking at your handwritten listing trying to figure out what you had done wrong," winces Steve Turner. John Gibson, whose game *Stonkers* contained an infamous game-crashing bug, recalls, "I had no debugger back then. I had to track down a crash bug by putting in some temporary code to change the border colour each time the program successfully reached a given point. I then repeated the process until I had a small section of code to examine for errors." However, when John failed to locate the bug in *Stonkers* in time, the game was released due to time pressure and an absence of a testing department. Another method of locating bugs was displaying the required information on the screen. Both Jim Bagley and Jas Austin cite this technique. "I'd display the values of registers and variables on the game screen," says Jas, "despite modern debugging tools that trap most crashes, I still use this trick today." Steve Turner's colleague, Andrew Braybrook, also wrote such a program, called a debug monitor. "It was a boon for tuning up games," says Steve, "as you could alter data while the program was running. The visual C debugger I use now is very whizzy with tracing breakpoints, but you have to stop the program to look at variables in the memory, so is somewhat less use than we could do on the Spectrum!"

With Great Power Comes Great Responsibility

A major revolution in games development would soon arrive with the advent of the 16-bit computers. "I embraced this with open arms," smiles John Gibson. "When Atari asked me to write some games for the ST, I was made up. Going from a Spectrum to the ST was like swapping an old banger for a Mercedes!" A bit unkind on the old Speccy there, John, but we take your point. The seeds of the modern video-gaming era were sown here.

"The processors were faster and had more registers and they had more colours and better sound," says Jim Bagley. "But new tools were



JOHN GIBSON

AGE: 68

FIRST SYSTEM: Sinclair ZX81

FIRST GAME: *Fly In A Bottle* (ZX81)

FIRST PUBLISHED GAME: *Molar Maul* (ZX Spectrum)

FAVOURITE CONSOLE/ COMPUTER TO DEVELOP FOR: Fujitsu FM Towns

CAREER HIGHLIGHT: *Zzoom* getting 100% in a review in *Popular Computer Weekly*.

CURRENTLY MAKING: John has retired since we started making this article. Happy retirement John!

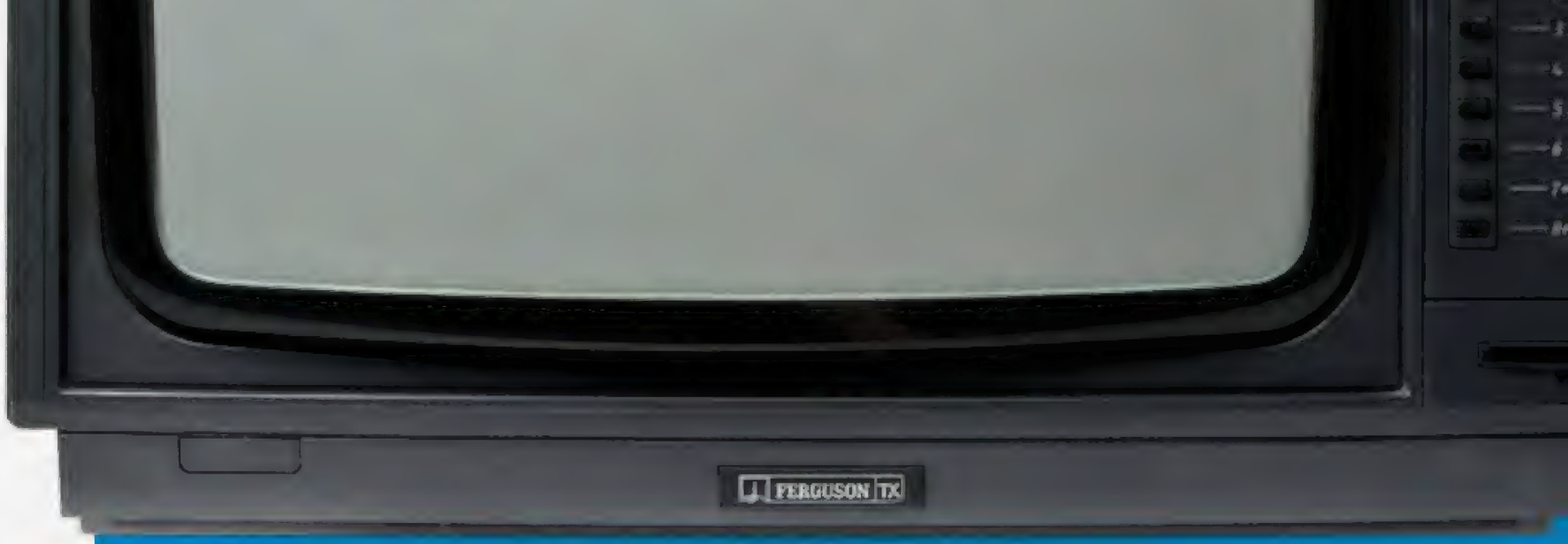
» What a difference a decade makes. The code to Digital Integration's first flight simulation in 1982...

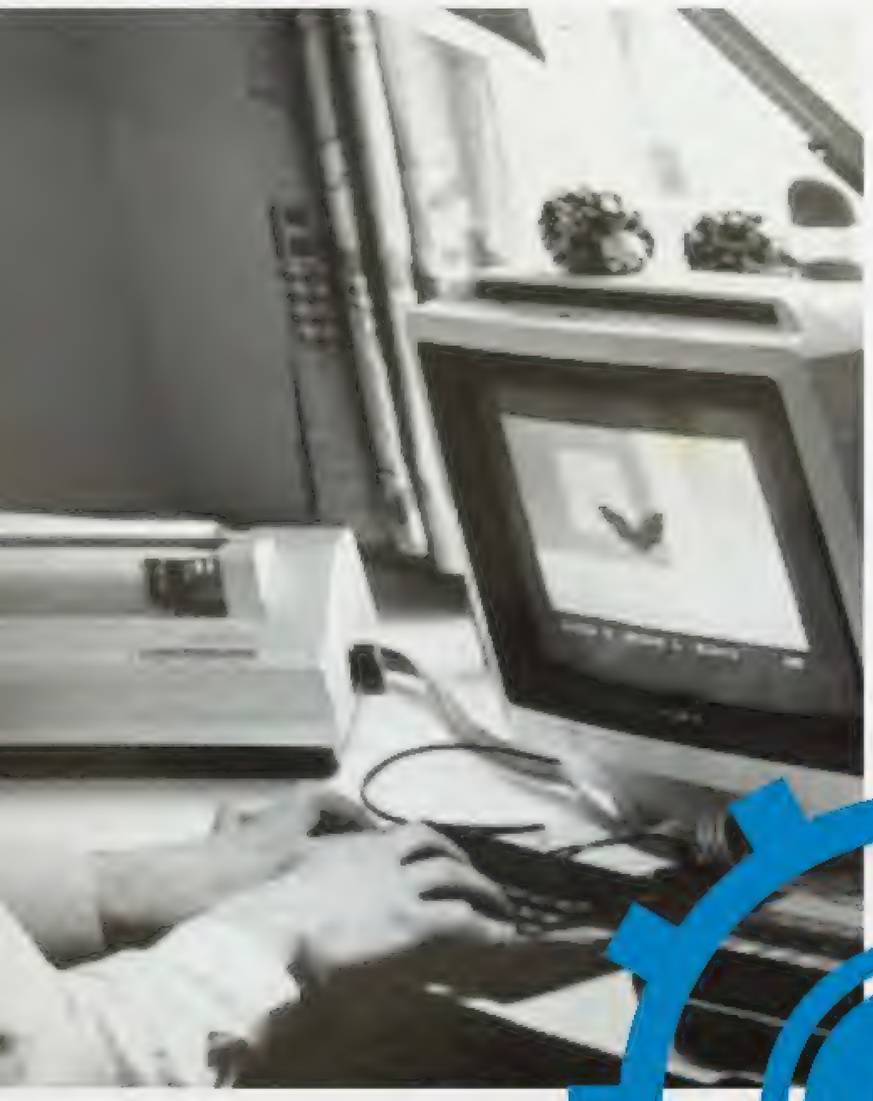
» ...and the code to *Tornado*, just over ten years later.

» Specific playtesting staff was unheard of in the early-to-mid-Eighties. Here, New Generation's Malcolm Evans plays his own game in search of bugs.

needed, so all programmers had to learn another chip's programming language." In addition to these changes, there had been a dramatic shift in the way software was being promoted and sold. Smaller companies were either folding, or being bought up by software houses. Big movie or arcade licences became commonplace. Games were big business and the pressure on those who created them intensified. "It was good to see some money and professionalism in the industry," notes Graftgold's Steve Turner. "However, the downside of this was the decline of originality. The commercial sector wanted a game similar to the last big thing, and was not interested in new ideas." John Gibson highlights, "development became more formalised. Gone were the days when you were told your deadline and left to get on with it. In came multiple layers of management, each of which constantly wanted to know when you'd be finished." New roles were created; Steve Wetherill contracted externally with Electronic Arts in the early Nineties, before joining the American company in 1992. "At EA I encountered 'producers' for the first time," he reveals. "And it referred to all its developers as 'Electronic Artists'. When I received a welcome letter from EA, it was addressed, 'Dear Electronic Artist'. This was a new way of looking at game development, and formed the basis of the way we work today."

What both Steve and John have hinted at here is the start of a ▶





DECODING THE CODE

The many tools coders use to make their works of art

ASSEMBLY LANGUAGE
■ A low-level language for any programmable computer which corresponds to the target's CPU architecture. This code is then converted by an assembler in a process known as assembling.

ASSEMBLER
■ Computers only understand binary. The assembler takes a level of code that humans can more easily comprehend and converts it into binary. The programmer must then know what instructions to use to write the source code, and it changes with different processors.

CROSS-ASSEMBLER
■ An assembler run on a different system from the target computer, ostensibly for ease or convenience (such as fast access) or if the target cannot run assembler itself. The result must be transferred using a compatible interface.

C++
■ Like C, C++ was designed with flexibility in mind. Created by Bjarne Stroustrup, it was intended to enhance C and include features from another language known as Simula.

C
■ An all-purpose programming language developed by Dennis Ritchie in the late-Sixties/early-Seventies and one of the most widely-used thanks to its efficient mapping of CPU instructions.

COMPILER
■ Similar to assemblers, compilers take higher-level languages and convert them into binary. Compilers are more commonly used when there is a wider variety of target machines being coded for.

SIMULA
■ Created in Oslo, Norway, in the late-Sixties, Simula is considered the first object-orientated programming language and has influenced many languages since, such as C++, C# and Java.

BASIC
■ An acronym for Beginner's All-purpose Symbolic Instruction Code, BASIC's purpose was to make programming accessible and enable people without a background of advanced science and mathematics to create programs, whether games or utility software.

ALGOL
■ Short for ALGOrithmic Language, this language, created in the mid-Fifties was one of four high-level languages conceived around this time. The others were Fortran, Lisp and COBOL.

{1985}

/ Amstrad's PCW range of computers debuts and is commonly used for the development of 8-bit videogames./

/ The dawn of the 16-bit home computers regenerates the now-cheaper Motorola 68000 microprocessor./

{1987}

/ SoftICE, an advanced PC debugger, is first released for DOS./

{1989}

*/ *Prince Of Persia* raises the bar of animation standards thanks to its rotoscoping technique./*

{1991}

/ The concise, general-purpose language Python emerges./

*/ John Carmack's *Catacomb 3-D* pushes the envelope technically and is one of the earliest well-known uses of the game engine concept./*

{1995}

/ The successful Java language is first used and becomes favoured for web applications, including the advent of browser-based videogames./

{1996}

/ DirectX, a term for a number of programming interfaces, is first used in Windows 95./

{1998}

*/ The *Unreal* engine is first revealed in the game, err, *Unreal*. Based in C++, the engine becomes an industry standard for first-person shooters../*

{2000}

/ C# (pronounced 'C sharp') is developed by Microsoft. The language is still widely used today and is currently in version v6.0./

{2004}

/ Microsoft's XNA Toolset enables coders to create games for Windows and the Xbox 360./

{2005}

*/ *Unity*, a cross-platform game engine based in C, C++ and C# is released by Unity Technologies./*

» [ZX Spectrum] The whimsical *Heartland*, arguably Steve Wetherill's finest hour on the ZX Spectrum.

» [Amiga] After much success coding for the 8-bits, most coders moved to the 16-bits, such as Steve Wetherill with *Myth: History In The Making*.

» [SNES] Nick Jones went from converting Raffaele Cecco games to the C64 to a major console film licence in *Alien 3*.

MEV DINC

AGE: 58

FIRST SYSTEM: ZX Spectrum

FIRST GAME: *Gerry The Germ* (ZX Spectrum)

FIRST PUBLISHED GAME: *Gerry The Germ* (ZX Spectrum)

FAVOURITE CONSOLE/COMPUTER TO DEVELOP FOR: Commodore 64

CAREER HIGHLIGHT: Being involved with great games such as *Enduro Racer*, *Last Ninja 2*, *First Samurai* and *Street Racer*.

CURRENTLY MAKING: Currently planning remakes of *First Samurai* and *Street Racer*.

> **"The early Nineties also saw a lot of third-party development tools and platforms appearing"**
>
> Mev Dinc

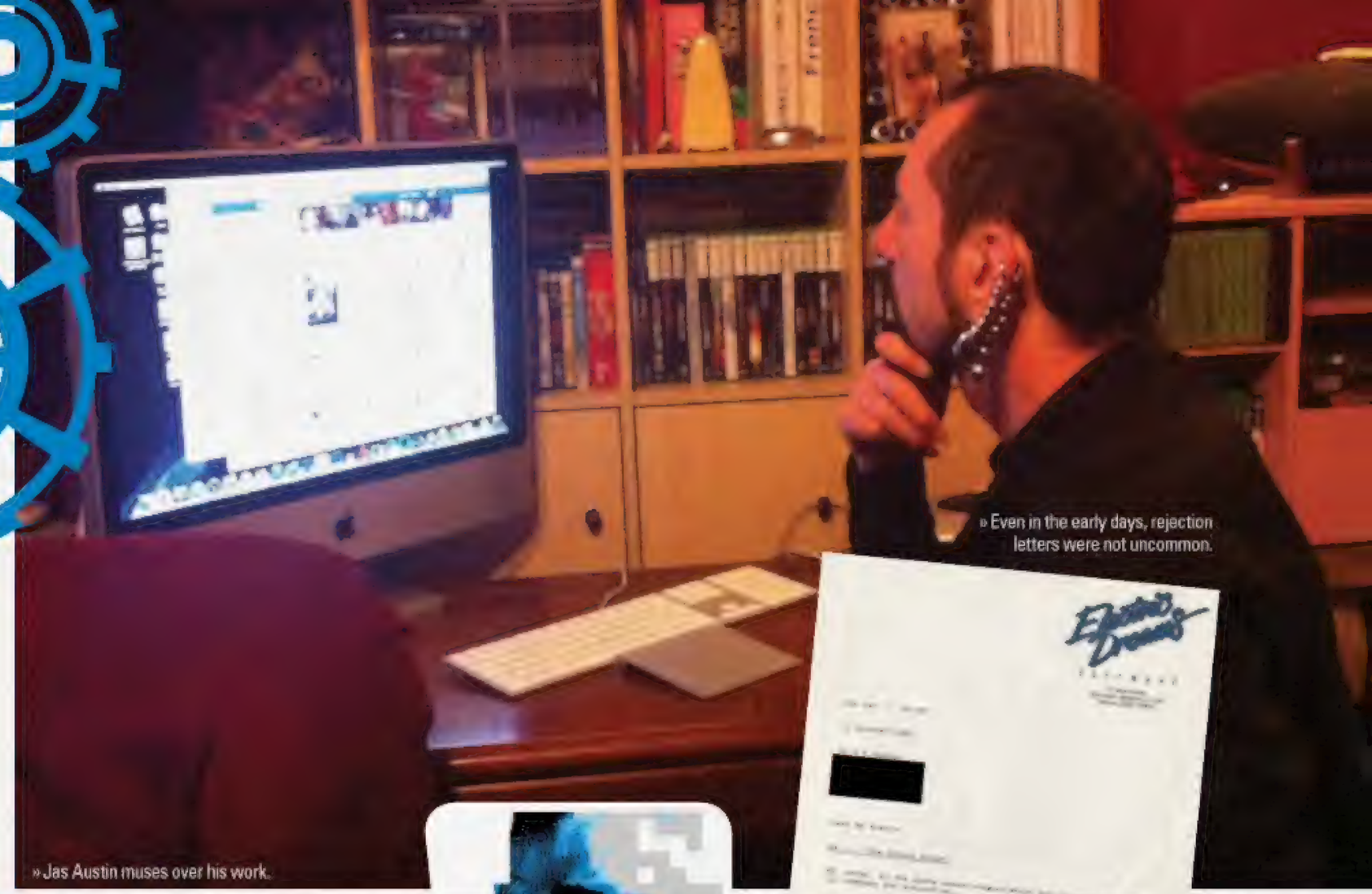
phenomenon both scorned and loved in equal measure today: the triple-A game. "In the late Eighties when Ocean was getting bigger and bigger, I was lucky enough to be a part of it," recalls Jim, who worked with Ocean developer Special FX. "Most new movies or arcade hits were snapped up by them. It was the starting point of the tent-pole releases – the triple-A games." The Nineties would bring bigger companies, bigger games and the era of the consoles, as support for the Atari ST and Commodore Amiga dwindled. To begin with, many previously 8-bit coders, especially those au fait with the Z80 chip, created games for the smash hit portable console, the Game Boy. Jas Austin in particular had great success with Nintendo's handheld thanks to his conversion of classic arcade shoot-'em-up, *R-Type*. "That was my first game for Bits Corporation," remembers Jas. "Foo Katan was boss and he asked me if I could do it. I had no clue how to do it, but told him of course I could." A complete lack of fear over new systems and architecture would seem to be a vital component of a veteran coder, as Jim Bagley remembers: "I loved new machines as they were a new challenge, especially when it got to the 32X where you had pipelined instructions and multiple main processors. I've always enjoyed learning new languages as well, so to be given a new piece of hardware is great fun." Mev Dinc, who by the Nineties had co-founded his own company, Vivid Image Developments, was fortunate enough to be working closely with manufacturers, enabling him to adapt to new hardware swiftly. "Plus the early Nineties also saw a lot of third-party development tools and platforms appearing," he says, "which made the transition easier. The consoles had obvious advantages such as fast loading times, but they brought new difficulties. You had to be a licensed developer to work on them and the publishers had to pay royalties to the manufacturers."

Under Pressure

Nick Jones, now working for Probe Software, acutely remembers the pressure of working on a major licensed release. "The biggest impact for me was when I worked on the SNES version of *Alien 3*. It felt a little intimidating as it was my first title for the console, but it was also really exciting." Despite his enthusiasm, Nick soon discovered one of the drawbacks of every new console. "Everything about the machine was overstated," he says, "but it was still a mind-blowing console. The resolution was amazing; you could have many layers of screens and they could interact with each other, layering and blending. And the

» [C64] Mev Dinc's first game: *Gerry The Germ*.

» Jim Bagley poses next to his workspace at home.



» Jas Austin muses over his work.

» Even in the early days, rejection letters were not uncommon.

STEVE WETHERILL

AGE: 52

FIRST SYSTEM: Sinclair ZX Spectrum

FIRST GAME: *Manic Miner* (Amstrad CPC)

FIRST PUBLISHED GAME: *Manic Miner* (Amstrad CPC)

FAVOURITE CONSOLE/COMPUTER TO DEVELOP FOR: ZX Spectrum with the Atari ST a close second.

CAREER HIGHLIGHT: Working at Westwood Studios on the *Command & Conquer* series.

CURRENTLY MAKING: Online real-time strategy game *Battle Pirates* at developer Kixeye.

NICK JONES

AGE: 50

FIRST SYSTEM: RML 380Z

FIRST GAME: *Galaliens* (Oric 1)

FIRST PUBLISHED GAME: *Herbert's Dummy Run* (Amstrad CPC464)

FAVOURITE CONSOLE/COMPUTER TO DEVELOP FOR: Commodore 64 and SNES

CAREER HIGHLIGHT: Making *Earthworm Jim* at Shiny Entertainment.

CURRENTLY MAKING: *NBA2K16* for Xbox One, PlayStation 4 and Windows.

amount of colours was astounding." Nick's amazement is unsurprising. His work on the Commodore 64 could contain a maximum of 16 colours; the Super Nintendo had 32,768. "I'd done everything I could think of with the C64 at the end, so I was very happy to be moving onto the more sophisticated machines." Steve Wetherill worked on PC games such as Westwood's *Command & Conquer* in the mid-Nineties and these brought their own set of problems. "The tools were better, but we saw the rise of the internet and local area networks. Initial obstacles were simply dealing with the variety of methods the players would use to get connected." Going into the Noughties, the rise of mobile gaming had issues. "The tools and platforms were extremely variable," grimaces Steve, "ranging from the terrible to the great. And the problem was that the popular platforms tended to be the worst ones to develop on!"

So how have our interviewees survived for so long in such a volatile and ever-changing industry? "Basically, because I love making games," smiles Jim, "and because of the ability to adapt and change with the hardware." "After 31 years doing games it still seems like the natural thing to do for me, Steve Wetherill adds. "Although for a year or two I did work on mobile banking applications. Game development did help there, allowing me to work at a high level, and then dive down to the metal where needed." Like any creative endeavour, there is also the appeal of others getting enjoyment from your work. "It's the sense of achievement that writing a game gives you," remarks John Gibson. "It's a bit like writing a book – you start with a useless lump of metal and plastic, and end up with something that others can take enjoyment from." Having put his heart and soul into the *Earthworm Jim* games, Nick Jones was deeply affected by the collapse of Shiny Entertainment, but the thought of leaving the industry never occurred to him. "I was maybe disillusioned, but I never started in games to get rich; I did it because I love gaming and have been able to adapt to new technologies." But having experienced the heady times of the Eighties, how do they feel about the improved technology and coding environments? "I really used to enjoy programming in assembler," says David Looker, "and languages such as C++ can make the programmer too remote from the hardware in my opinion." Steve Turner concurs: "What I don't like is having to rely on other code. You can't just take over the operating system yourself and draw to the screen directly – you have to deal with layers of systems that take time to master." John Gibson adds, "I'd say today it's easier to write code and easier to debug it. I enjoyed writing programs in assembly language, but it was hard work."

The Future Of Coding

"I think William Gibson's vision of coding is pretty much how it will be," muses Steve Turner. "Layer upon layer of system will mean that coders will get anywhere near the metal, and few of them will understand the lowest, oldest layers. These become unamendable as too much relies upon them – until the machines start coding that is." Jas Austin echoes Steve's Skynet-esque thoughts. "Over the years I've noticed more and more layers between the actual code running on the machines architecture and the code entered by the programmer," he notes. "And with game development engines such as *Unity* and *Unreal* that combine high-level scripting with graphical interfaces, perhaps one day there will be no need for coding at all." On Jas' latter point, Steve Wetherill adds, "I see a lot of coding effort going toward creating tools to empower designers and artists and many games run on engines and there's a move towards scripting. That said, there are many different types of game, and each has its own set of standard technologies." While he admits to being unsure of the future, Jim Bagley is curious as to what will happen. "It's fragmenting into so many directions. When generations of coders only know how to do drag and drop, nobody is going to make compilers any more."

Fittingly, our coders encapsulate how the industry works today. Some, such as John Gibson and David Looker work within large teams creating major titles. Others including Jim Bagley and Jas Austin work in mobile gaming, an area where the one-man coder can flourish, bringing our coding history full circle. ✱

» [PS3] John Gibson has experienced the full journey from lone coder to part of a massive team on PlayStation 3 racer *Motorstorm*.

Our thanks to our interviewees: Jas Austin, Jim Bagley, Mev Dinc, John Gibson, Nick Jones, David Looker, Steve Turner and Steve Wetherill. Also thanks to Simon Brattel.

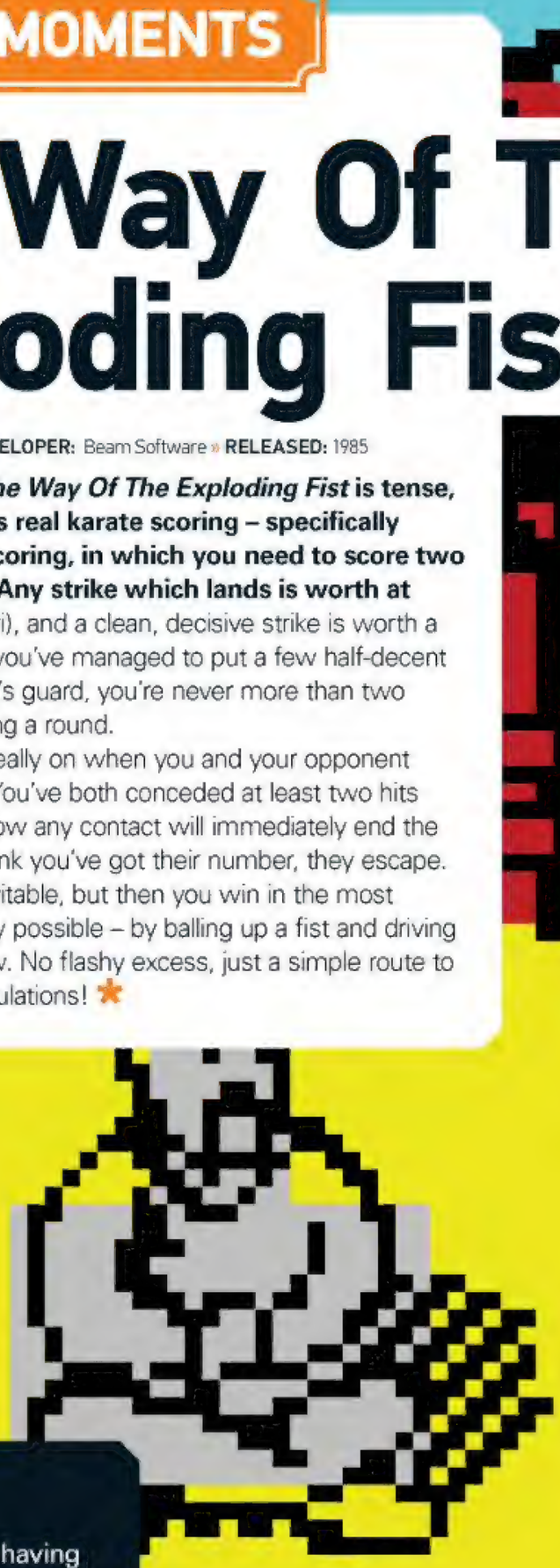
CLASSIC MOMENTS

The Way Of The Exploding Fist

» **PLATFORM:** ZX Spectrum » **DEVELOPER:** Beam Software » **RELEASED:** 1985

Every fight in *The Way Of The Exploding Fist* is tense, because it uses real karate scoring – specifically shobu nihon scoring, in which you need to score two points to win. Any strike which lands is worth at least half a point (waza-ari), and a clean, decisive strike is worth a full point (ippon). Even if you've managed to put a few half-decent kicks past your opponent's guard, you're never more than two good hits away from losing a round.

However, the heat is really on when you and your opponent are at a point and a half. You've both conceded at least two hits to reach this point, and now any contact will immediately end the round. Every time you think you've got their number, they escape. It looks like a draw is inevitable, but then you win in the most simple and surprising way possible – by balling up a fist and driving it into the other man's jaw. No flashy excess, just a simple route to a narrow victory. Congratulations! ✱



BIO

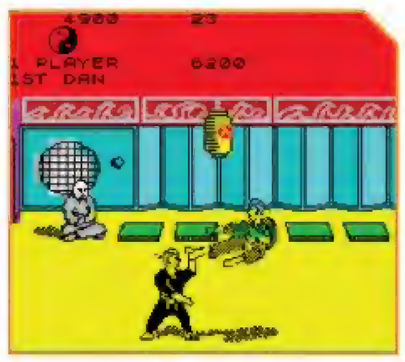
With *The Karate Kid* having brought martial arts back to the forefront of popular culture in 1984, it's no surprise that Beam Software would choose to develop a martial arts game not long afterwards. However, *The Way Of The Exploding Fist* didn't need to ride any coat-tails – with realistic moves and a compelling fighting system, the game garnered rave reviews and quickly became recognised as one of the first truly great games in the one-on-one fighting genre. That acclaim translated to commercial success too, with the game topping the Commodore 64, Spectrum and Amstrad CPC charts as well as the all-formats chart.

MORE CLASSIC THE WAY OF THE EXPLODING FIST MOMENTS

Take A Bow

TWOTEF doesn't just use realistic movements and scoring systems, but includes the etiquette that is integral to martial arts. The fighters bow before each fight, and the winner celebrates by straightening his belt and bowing once again. Compared to the outlandish showmanship of today's fighting game characters, it's a rare display of humility.

Wax On, Wax Off

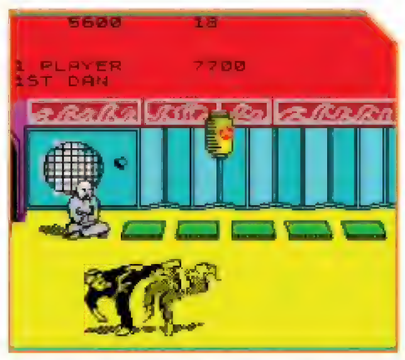


For some players, attack might feel like the best form of defence, but Mr Miyagi didn't have Daniel make his car all shiny for nothing. Blocking isn't a perfect strategy, not least because you can't defend your whole body, but a perfect block looks great and feels even better – especially as it creates an opportunity to respond with your own strikes.

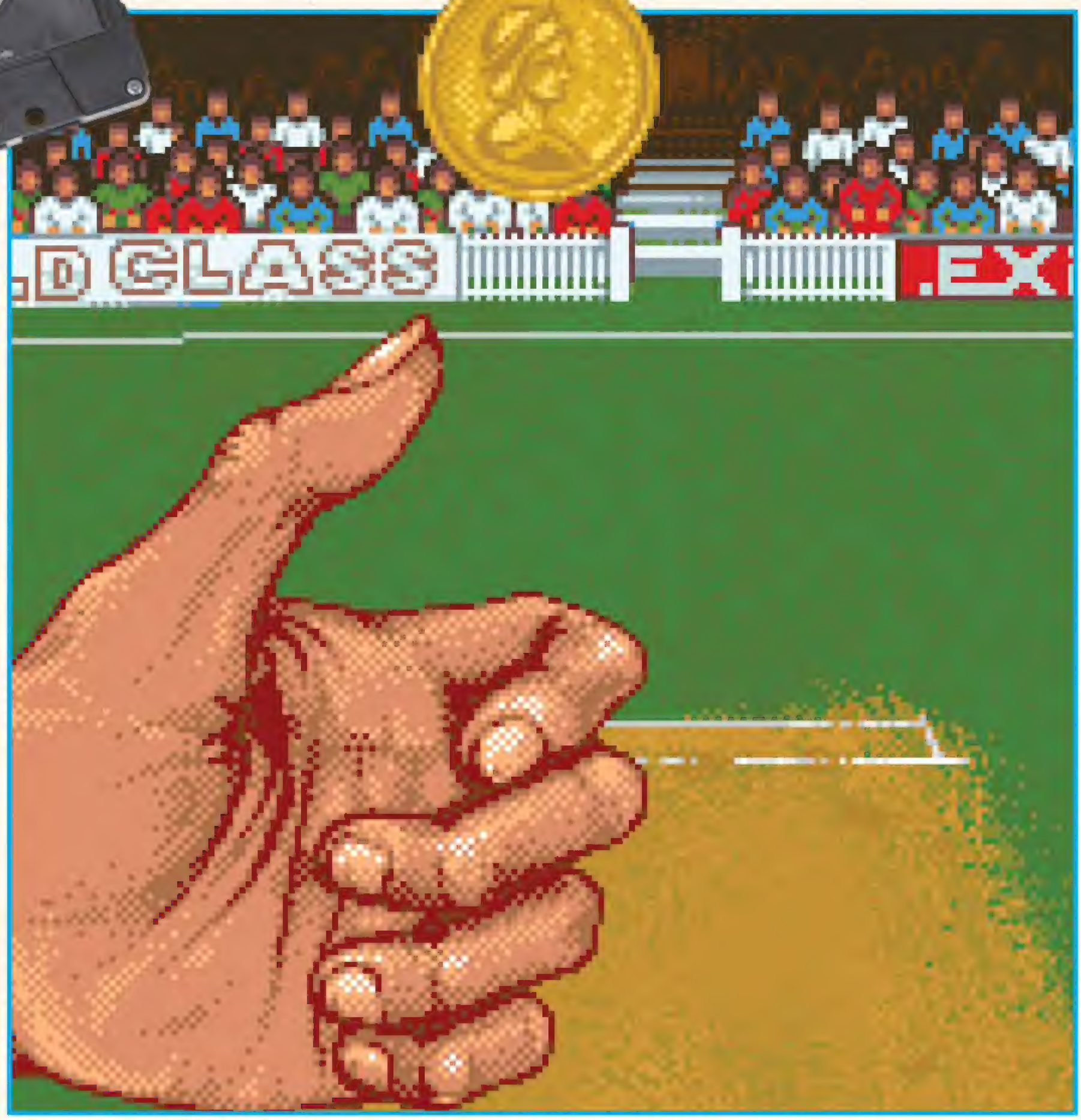
Back Attack

The most advantageous position in *TWOTEF* is to be behind your opponent's back, requiring them to manually turn around to face you. While you're still vulnerable to the likes of spinning kicks and sweeps, the slow and painful process of turning around is easy to interrupt with a devastating attack of your own, which should result in a nice easy point.

Spin Doctor



If you want to finish off an opponent in style, there's no better way to do it than with the spinning kick. It has an incredibly long start-up time due to the spinning animation, so it's pretty hard to land – however, if an opponent leaps in unprepared with a somersault you can count on delivering a skull-crushing finale which they won't be forgetting any time soon.

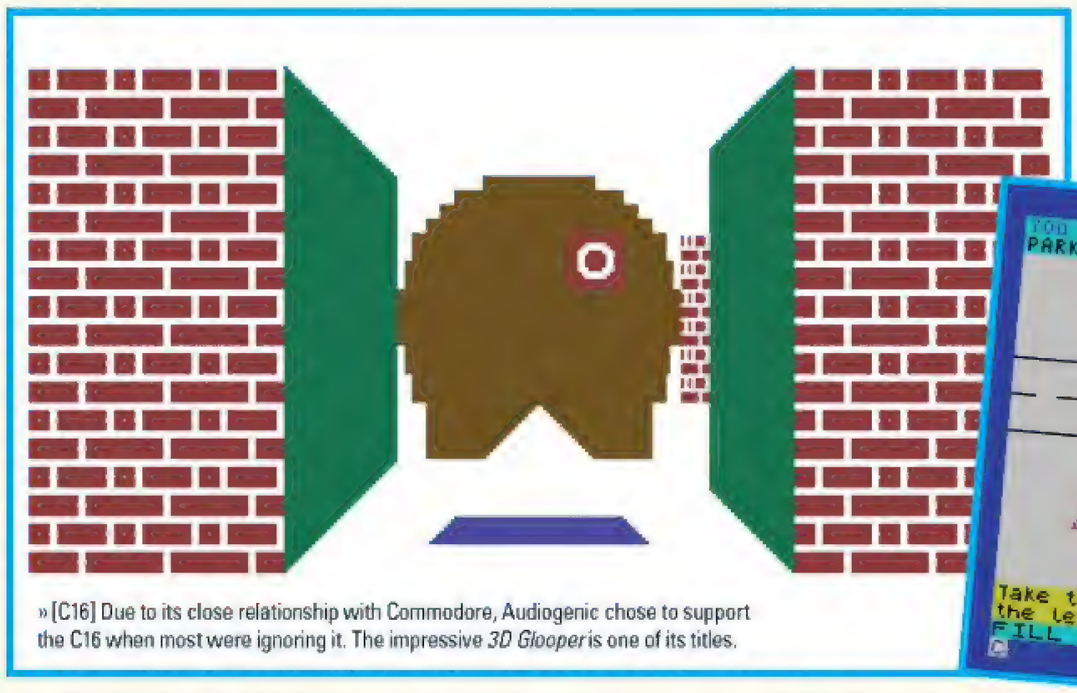


Audiogenic remain one of the oldest publishers in the world today. From its recording studio roots to its huge success with sports games it kept a reputation for quality that was well deserved. Kieren Hawken finds out the secret to its success

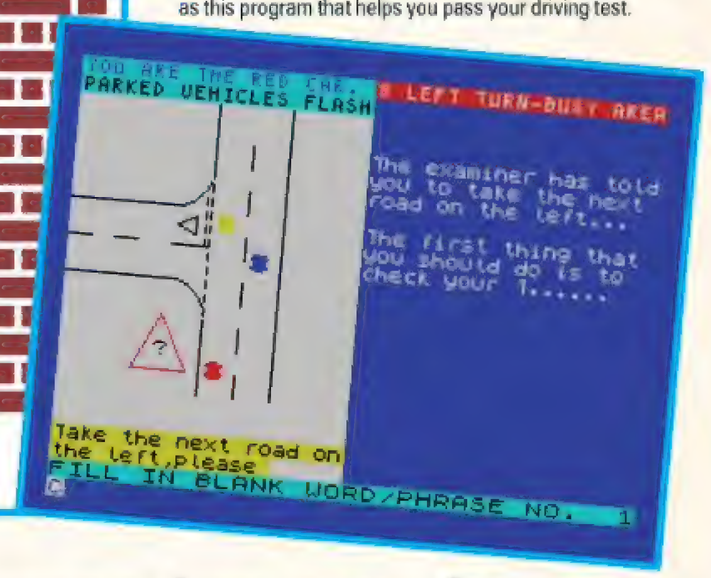
Audiogenic

In the know

- Audiogenic can trace its roots right back to 1975.
- It originally recorded music before entering the software business.
- In 1985 SuperSoft bought a controlling interest in the company.
- Its first games were published for the vintage Commodore PET.
- Audiogenic worked with several sports stars such as Emlyn Hughes and Graham Gooch.
- Commodore was always the company's focus but it also heavily supported the BBC.
- *Loopz* was such a huge hit that it was licensed for the arcades by Capcom.
- *Krusty's Super Fun House* was originally known as *Rat Race*.
- Audiogenic published games for an incredible 22 different platforms.
- The company is still going to this day, although no longer producing software.
- It only ever released one arcade port, Gottlieb's excellent *Exterminator*.
- Audiogenic's assets were eventually sold to Codemasters.



» [C16] Due to its close relationship with Commodore, Audiogenic chose to support the C16 when most were ignoring it. The impressive *3D Glooper* is one of its titles.



» [ZX Spectrum] Audiogenic didn't just create games, it also produced a number of educational products too, such as this program that helps you pass your driving test.

The Audiogenic story starts in 1975 at the Sun recording studios in a sleepy village called Theale in Berkshire, which is best known for being the filming location for the live action *Borrowers* film. This location is also notable in that at this time the vast majority of professional recording studios were still located in London. The Sun studios were run by Martin Maynard and among his clients were chart-topping industry veterans such as The New Seekers, Van Morrison and Alan Clayson. Another interesting facet of the Sun studios was that it also included its own tape reproduction plant, it was this facility that led Martin to venture into the software industry. As the home computer market began to explode, the many small software companies in existence at the time were looking for ways to produce their games in great volume and get them into retail. Audiogenic's first customer was none other than Commodore, the legendary manufacturer struck a deal with Martin to reproduce software for the new Commodore PET computer. This got Martin thinking and he decided to fly over to California to try and secure deals to produce software for the next Commodore machine, the VIC-20. It wasn't long before deals were struck with companies such as Cosmi, Broderbund and Creative Software to master and sell their games in the UK.

Audiogenic's next venture would prove less successful as it chose to step inside the world of computer peripherals. This product diversification included hardware such as the KoalaPad and Entrepro Quick Data Drive. Sales were less than stellar, though, and caused the company to close its doors in 1985, but this wasn't the end, far from it. Peter Calver stepped up with his own company, SuperSoft. Peter was no stranger to this market, having already sold numerous games for both the Commodore PET and VIC-20 computers, giving SuperSoft and Audiogenic a common interest. SuperSoft had also entered the hardware market, although with much greater success, putting out successful products such as Petmaster Superchip firmware and the PET High Resolution Card. Due to mutual interests Peter decided to purchase the assets of Audiogenic and take a controlling stake in the company. Martin was left with a small share and the money allowed him to return to his true love, the music recording business, which he is still doing to this day under the name Sounds Good. Peter's partner in Supersoft was Pearl Wellard and he explains a little bit more about how it all came about. "I founded Supersoft in 1978, initially to publish the games that I wrote for the Commodore PET," he begins. "I was soon approached by other authors who wanted me to publish their programs. We started producing utilities, business software and even hardware, such as a graphics card for the PET. In 1985 the original Audiogenic business was virtually bankrupt and as we'd had some dealings with it in the past including licensing VIC-20 versions of some of our PET games to it, we bought its assets and took on the staff, putting everything into a new company called Audiogenic Software."

> **"I remember spending a whole official Acorn show signing autographs, which was quite bizarre but emphasised just how big the whole scene was then!"**
> Darryl Still

This wasn't the end of Peter's spending spree; he also purchased Icon Software in Newcastle. Leaving him several, what we would now call, studios around ▶

» [VIC-20] Much of Audiogenic's early output was for the Commodore VIC-20, *Alien Blitz* is a very fun *Space Invaders* clone.

» Darryl Still (right) boarding Audiogenic founder (centre) Martin Maynard's private jet with TV and radio star Psychologist Dr Phil (left).

Timeline

1975 Audiogenic is founded as a Berkshire recording studio by Martin Maynard.

1978 SuperSoft is founded by Peter Calver to produce products for the Commodore PET.

1979 The company signs a contract to do tape reproduction for Commodore in the UK.

1984 A deal to distribute the KoalaPad, an early graphics tablet from Koala Technologies, in Europe is struck.

1985 The failure of the peripherals business sees the original Audiogenic close its doors.

SuperSoft buy a controlling stake in the company and re-launch it as Audiogenic Software.

1987 Peter Calver buys out Martin Maynard, who returns to music studio management.

1988 Pioneering footy game *Emlyn Hughes International Soccer* is released to great acclaim.

1989 *Emlyn Hughes* is ported over to the 16-bit platforms to less fanfare.

1990 Audiogenic releases its one and only arcade conversion in Gottlieb's *Exterminator*.

1991 The last BBC Micro game by the company, a very good conversion of *Loopz*, finds its way into stores.

1992 Audiogenic license its game *Rat Trap* to Acclaim to be converted into *Krusty's Super Fun House*.

1996 Codemasters acquires Audiogenic's development studio to produce further cricket games under its own banner.

2004 The previously unreleased Atari Lynx version of *Loopz* is finally published by Songbird Productions.

2011 *Emlyn Hughes International Soccer* is released for iOS-based platforms.

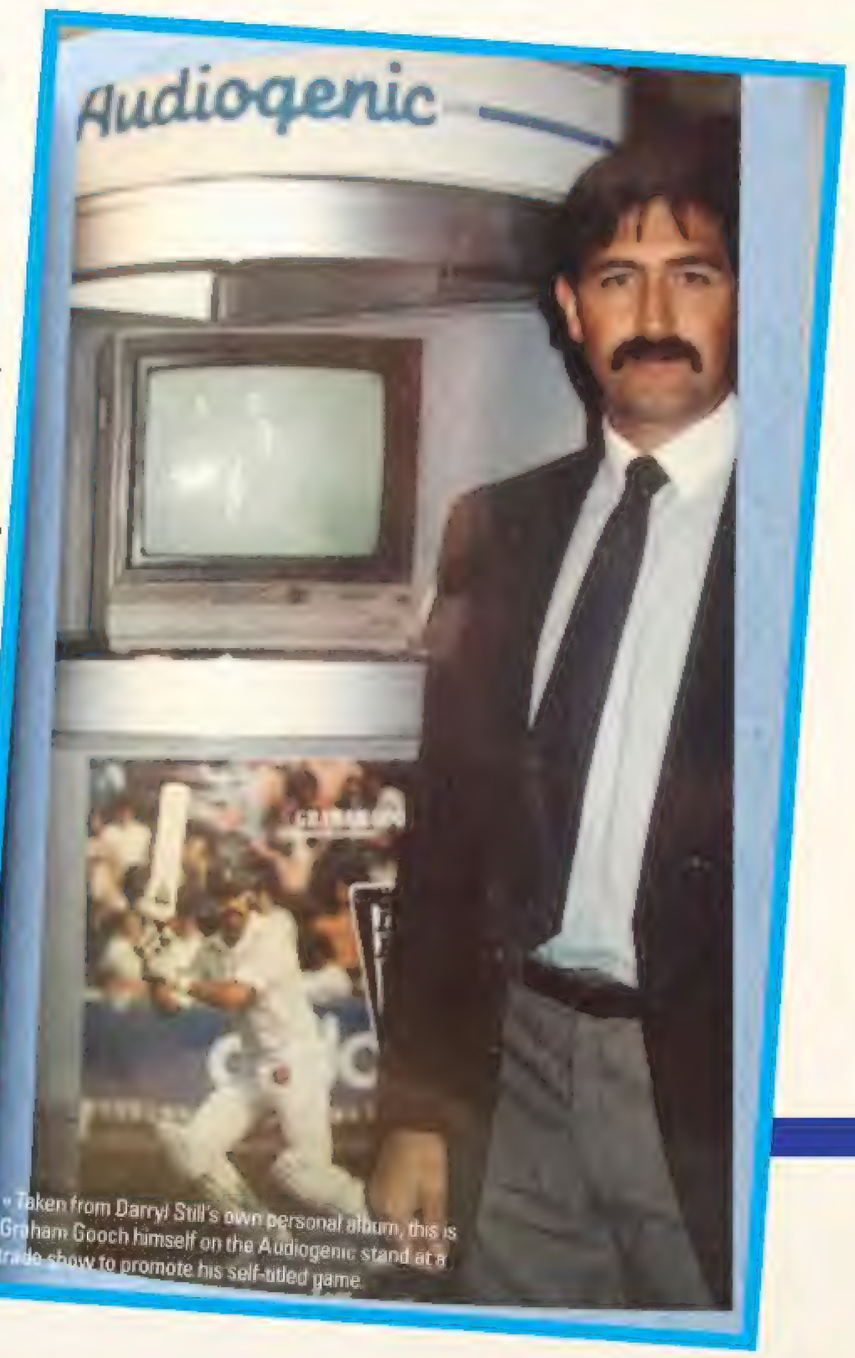
» [C64] *Alice In Videoland* features some stunning graphics for the Commodore 64 and remains a system exclusive too.

the country and an entry into the then lucrative BBC Micro market. For a while the different parts of Audiogenic co-existed with its own staff as the former Audiogenic product manager, Darryl Still, remembers. "The company was completely schizophrenic at the time I joined, with two completely different parts. The Harrow office, Supersoft, had bought a share of the original company and was run by Peter Calver and Pearl Wellard. Then there was the Theale office, ASL, where the original MD, Martin Maynard, was still situated. I was based in Theale and was mainly concerned with driving the label's presence in the BBC market where we were the number three publisher after Acorn and Superior Software. We then bought Icon Software from Newcastle and gained access to some great developers up there such as Gary Partis and Peter Scott. I remember these two fellows [well] and I spent a whole official Acorn show signing autographs, which was quite bizarre but emphasised just how big the whole scene was then!" In fact, Gary Partis also recalls this story well. "Peter Scott and I worked on the Audiogenic stand at the *Acorn User* show in 1987 signing copies of our games with Darryl Still," he remembers. Some one had spotted Andrew Braybrook, of C64 *Uridium* and *Paradroid* fame, walking around the exhibition. I immediately grabbed a cassette inlay for *Psycastria*, went up to Andrew, and asked him for his autograph on the inlay, which he duly gave me. When he later found out what he had signed, he was not too happy!"

With history of the company out the way we thought it would be nice to find out what got Peter into videogames in the first place. "I queued up for half an hour just to play *Pong* in a pub in the early Seventies," Peter quips, telling us probably all we need to know. So what challenges did those earlier years face? "In the late Seventies and early Eighties the market was very small," he explains. "As it grew it attracted big media companies, mainly from the music industry, but also from publishing. They pushed up the costs for everyone else and took a big share of the market, although in the end most of them lost money and pulled out. We kept in it because we focused on gameplay, which meant that our games were still being played many years after they were released."

Gary Partis was key to the company's success on the BBC Micro and recalls his route into the world of videogames. "I can't remember the reason I went to Audiogenic," he remembers. "But what I do recall is, for some reason, sending in an early version of *Psycastria* after Tynesoft offered a rather nice one-off cash amount, and Audiogenic must have offered a better deal." So what made him the BBC expert he went on to become? "The BBC Micro was the first computer I owned, and even when I developed games for other 6502 base computers, they were still developed on the BBC Micro. This was pretty much because it had an built-in assembler, decent keyboard, good video resolution and a proliferation of additional hardware. My final BBC Micro development machine was a BBC Master, with both an internal and external 65C02 co-processors, 20 megabit hard drive, dual floppies, modem and a direct hardware connection to other target hardware. I could compile code, squirt to target hardware and execute it all in a few seconds. Peter Scott and I were primarily Acorn programmers, so Audiogenic may have felt obliged to remain in the Acorn market because of us too!"

Although he came into the company much later than the others, producer Gary Sheinwald ended up playing a key part in Audiogenic, taking it through the transition from the 8-bit computer market to consoles and 16-bit systems. He begins his story with how he found his way into the market. "In 1989 I was working in Central London at Rainbird Software when British Telecom decided to get out of the games business and sell it (along with sister label Firebird) lock stock and barrel to Microprose. I wasn't interested in relocating to Gloucestershire, so I took the severance package, bought a classic Triumph Spitfire and spent



» Taken from Darryl Still's own personal album, this is Graham Gooch himself on the Audiogenic stand at a trade show to promote his self-titled game.

Defining games

Emlyn Hughes International Soccer 1988

Although it was released across all the major formats of the time it's the Commodore 64 version of this game that is most often brought up in discussion where it's rightly regarded as one of (if not the best) football games on the machine. Audiogenic also released a quiz-based game starring the former Liverpool and England captain to go alongside it, which is not surprising given Emlyn's many TV appearances on shows such as *Question Of Sport*, *Sporting Triangles* and *Box Clever*. *International Soccer* was most recently ported to iOS platforms in 2011 by Elite.

Loopz 1990

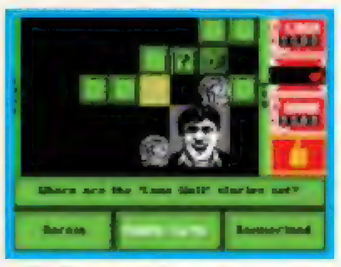
Undoubtedly the most successful game to be published by Audiogenic itself, this addictive puzzle game was released on no less than fifteen different formats. According to Audiogenic producer Gary Sheinwald it had some pretty big fans. "Jez San, whose company, Argonaut, was coding the Game Boy port for us, had sent a copy to Nintendo in Japan to look at and the first time I met Miyamoto, at Las Vegas CES, after being introduced he smiled and said, 'Oh! *Loopz* is my favourite game!' Later on I destroyed him over a few games of *Air Hockey* at a Namco party that evening at Caesar's Palace."

Krusty's Super Fun House 1992

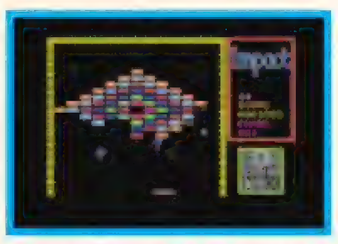
Although it was published by Acclaim, this fun strategy puzzle game came via Audiogenic as creator Patrick Fox explains: "I was one half of a development team (Fox Williams) who sold a game concept to Audiogenic. The concept was backed up by a four level, playable demo. Audiogenic liked it, and offered us a contract to develop the game. The game was called *Rat Trap*, but during development, Audiogenic did a deal with Acclaim who put a *Simpsons* licence on it, and the game became *Krusty's Super Fun House*". The game was published across a multitude of formats and was very successful.

Graham Gooch's World Class Cricket 1993

Over the years Audiogenic became well known for its cricket games and made several games featuring the ex-England batsman. The *World Class* game was the culmination of that and was an upgrade over the previous 8-bit affairs. First released on the ST and Amiga, it was also one of the first Audiogenic games to find its way onto home consoles when it was released for the Mega Drive bearing several different names including the monikers of Allan Border, Jonty Rhodes and Brian Lara. A Jaguar version was finished and advertised but was never released.



» [ZX Spectrum] Keen to exploit its licence as much as possible, Audiogenic also put out a pretty decent quiz game featuring ex-England captain Emlyn Hughes, too.



» [Atari ST] *Impact!*, also known as *Blockbuster*, was an incredibly good *Arkanoid* clone that also featured a very handy level editor to produce your own stages.

» [Atari XL/XE] In 2014 an excellent homebrew version of Audiogenic's C64 classic *Ransack* was produced for the Atari 8-bit home computers.

the summer driving around having fun! When the weather began to turn for the worse I started to look around and heard that there was a production opening at Audiogenic, which was located in Harrow Middlesex, just a few miles from my home. Not having to commute into London on the Northern Line seemed very appealing so I got in touch, went in and met with the boss Peter Calver, who offered me the job." Gary is credited on numerous games as both a producer and as a designer, we were obviously interested to find out which role he preferred. "Well firstly, I forget what my title was when I first joined – but I still have a card from Audiogenic when my title was development manager, but it was neither 'designer' nor 'producer'. But there weren't any other in-house production staff at Audiogenic at the time, we were a very small team. I don't think we were even using the term producer at that point – it was a very American term. We pretty much used to call producers project managers until approximately the early-Nineties as far as I can recall. Anyway, what that meant was that there was very little delineation between designer and producer. For example, when we decided to develop a cricket game, I knocked out a design document and we went and built a development team."

We already mentioned how Gary was largely responsible for managing the shift from 8-bit to 16-bit and onto console gaming, so it's only right that we asked him to tell us about this in a bit more detail. "The first game I worked on when I arrived Audiogenic was getting the Amiga/ST versions of *Emlyn Hughes International Soccer* out the door. I was already very experienced producing 16-bit games from my first days in videogame development at Rainbird, because ▶

> **"The BBC Micro was the first computer I owned, and even when I developed games for other 6502 base computers, they were still developed on the BBC Micro"**
> Gary Partis

Arcadegenic

The gamble that failed

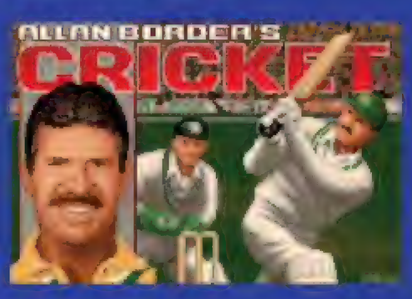
One of the lesser-known aspects of Audiogenic is its unsuccessful ventures into the arcade. The first of these stories is around an arcade version of *Loopz*, we'll let Audiogenic boss Peter Calver explain...

"*Tetris* had moved successfully from home to arcade and when we were negotiating for Mindscape to publish the Nintendo versions it also wanted the coin-op rights as they had a good relationship with Atari (who had produced the *Tetris* coin-op). However I was talking to Capcom as well about the Nintendo versions, and we ended up with Mindscape getting the Nintendo rights and Capcom getting the arcade rights. Sadly this version never got a widespread release." The company also released a home port of the innovative Gottlieb arcade game *Exterminator*. Once again we'll let Peter tell the story: "*Exterminator* was an experiment and we were pleased with the results, but it was expensive, and we lost money. We still had plenty of good ideas of our own, so after that there was no need to license further arcade games."

The DNA of Audiogenic

Sporting Greats

Audiogenic carved itself a great reputation for producing quality sports games. To this day it still has one of the highest regarded 8-bit football games out there and one of the best cricket games under its belt. It also successfully ventured into other sports, too, such as rugby, tennis and even chess!



Auntie Beeb

After Acorn and Superior Software, Audiogenic became the biggest producer of games for the BBC Micro. It supported the BBC right into its twilight years with titles such as *Loopz*, *Frankenstein 2000*, *Helter Skelter* and *Psycastria*. Most of the games were also released for the Acorn Electron.

Hardware Heroes

Software was not the only area that Audiogenic stuck its nose into, it also ventured into the hardware market with a number of different products aimed at the various Commodore home computers. Peter Calver cites his close relationship with the American company for this successful sideline.

Obscura Machina

As well as producing games for big platforms of the time such as the C64, Spectrum, ST and Amiga Audiogenic also produced some of its games for more obscure formats. Audiogenic games appeared for systems such as the Commodore Plus/4, NEC PC 88, Sharp X68000, Amiga CD32, Amstrad PCW and Atari Lynx.

Quality Control

Many of the people we spoke to who were involved in Audiogenic cited the same specific reason for the company's longevity and success: its focus on quality. Audiogenic employed producers and testers well before it became a standard in the industry and this shows in the overall quality of its games.

» [DOS PC] *World Class Rugby* proved to be a big international success for Audiogenic, much to the surprise of everyone at the company.

"I took the severance package, bought a classic Triumph Spitfire and spent the summer driving around having fun!" Gary Sheinwald

▶ it was focussed on 16-bit more than 8-bit. So when I moved to Audiogenic I was already well equipped in that regard and it didn't have any effect on my role per se. The majority of my early work in the industry was on 3D polygonal titles, when they were the exception, rather than the norm, and in a way it was going backwards (technologically, if you look at the progression of the industry tech-wise) to sprite-based 2D games, four-way scrollers and so on. But the tech should always be the cart, not the horse, and some of the most fun games I ever worked on were non-3D games I produced at Audiogenic such as *Exile*, *Loopz* and *Krusty's Fun House*. I think the main change that I was able to advocate at Audiogenic was to push to embrace the big shift from home computers to games consoles, at a time when Nintendo and Sega were rising rapidly in popularity and eroding the traditional British home computer games market (even though Amiga/ST were still quite popular, they had started to decline). That was probably the biggest cultural shift within the company for a long time – no longer being able to control the entire process of designing, developing, mastering, duplicating and then releasing your own titles. But rather having to reach out to meet with publishers from all over the world, and pitch to them, sign a publication/distribution deal and work in concert with them to bring it to market."

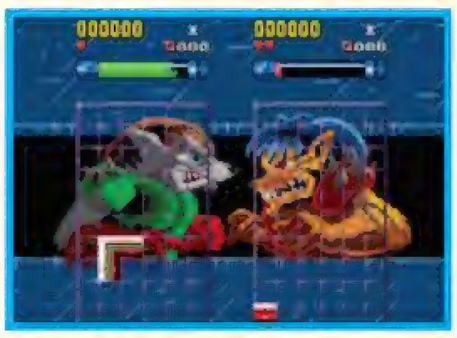
Somebody who was quick to praise Gary's influence was Patrick Fox, one half of dev team Fox Williams. "I never spent much time at Audiogenic's offices," he begins. "It was just the occasional visit every now and then. However I got to know some very good people, one of whom was Gary Sheinwald. Gary helped me tremendously in the next stage of my career, after Scott and I went our separate ways."

One thing that Audiogenic became incredibly well known for was its sports games, especially cricket, and Peter explained to us how they came to specialise in this area. "I originally picked cricket because nobody had ever produced a half-decent cricket game," he says proudly. "There were some pretty good soccer games already out there. We started writing *Graham Gooch Cricket* in 1984 and it became one of the first new Audiogenic titles." But, parking the cricket games for the moment, we just had to ask about the highly regarded *Emlyn Hughes Soccer*. "I had been a big fan of *International Soccer* on the C64" explains Peter. "Following the success of our cricket games we decided to produce a soccer game – and perhaps the most important decision was to split it into two, with one programmer writing the front-end and another writing the arcade section. At that time most games were still being produced by a single programmer who sometimes did the graphics and sound as well, so games rarely had the polish that we expect today. Both of the programmers I picked were highly talented – Michael McLean had written *Graham Gooch Cricket* for the C64 and Graham Blighe had converted it to the Amstrad. By using two programmers we made sure that the front-end wasn't just an afterthought, whilst Graham was able to put all his effort in to the arcade section. We had somebody else creating the graphics, my brother Andrew Calver, whilst I was responsible for much of the design including the innovative drop-down menus and the in-game controls. Throughout the development we had a great games tester, my partner's son Jeremy Wellard, who was then in his early teens. He went on to found a big games development company called HB Studios in Canada, which produced sports games for EA, and for a few key years he had been my development manager at Audiogenic."

But not everyone liked sports at Audiogenic, when we asked how the others felt about sports game some of the replies were pretty cutting. "I can't stand sports, but a game is a game no matter what its subject

» [Amiga] *Bubble And Squeek* was a highly colourful co-operative platformer from Fox Williams.

» [Amstrad CPC] *Contraption* is a unique platformer that was released across several formats.



» [Amiga CD32] *Super Loopz* was based upon the unreleased Capcom arcade game.

Where Are They Now?

Peter Calver

Peter still runs Audiogenic to this very day, although it no longer produces its own software and just licenses it out to others. He also owns the genealogy website Lost Cousins, which he has been running for over eleven years. His fortnightly newsletter reaches over 60,000 family historians and the site was also ranked 68th in the Top 100 Genealogy Websites of 2015, which might not sound very impressive until you realise that there are over 300,000 genealogy websites around the world.

Gary Partis

After leaving Audiogenic, Gary went on to write games for Tynesoft up until 1992 and then moved over to system peripherals and hardware design. Writing games for slow computers in the Eighties became a perfect background for developing high-speed, low-resource, deterministic, real-time systems in the present day.

Gary Sheinwald

After leaving Audiogenic in 1992 Gary joined independent developer Bits Studios as its development manager. He worked primarily on a large number of licensed movie/TV titles and in 1995 Twentieth Century Fox re-started its own games division, Fox Interactive. It offered him a producer position in Los Angeles almost immediately and so he moved out there in November of that year to primarily produce the *Simpsons* and *X-Files* games amongst others. In 2002 he moved to Warner Bros. Interactive Entertainment and was the senior producer for *Enter The Matrix*, *300*, *The Matrix: Path Of Neo*, *Looney Tunes*, *Batman Begins*, *Justice League Heroes*, *Friends* and *The Dukes of Hazzard*. He's still employed by Warner Bros. and is currently working on a 'toys to life' game scheduled to launch in 2016.

Patrick Fox

After the demise of Fox Williams Patrick worked with Gary Sheinwald on various projects at Bits Studios. Following on from that he worked for several other games companies until he took an in-house position at Attention To Detail where he was the lead artist and game designer. There he worked on both *Sydney 2000* and *Salt Lake City 2002*. After Attention to Detail eventually went under he left the games industry and hasn't worked there since, much to his own regret.

Darryl Still

After leaving Audiogenic Darryl decided to follow Martin Maynard who gave him the chance to set up his own budget software label called Top Ten Software under the umbrella of Maynard International. However, undoubtedly Darryl's most famous role after leaving Audiogenic, was as a product and marketing manager for Atari UK where he spearheaded the successful release of the Atari ST in the UK before launching the Lynx and Jaguar across Europe as a whole. It was in Audiogenic's tape reproduction plant that he first got to know Atari as it was also reproducing cassettes for the company there. Darryl is now CEO at Kiss, a digital distribution platform for indie games.

matter is," Patrick laughs, while Gary Sheinwald is still trying to erase his memories of cricket games. "I had to work on the design for the *Graham Gooch World Class Cricket* game, but I had always hated cricket. I had to read the rules and then go round to my auntie Janet's house (she's still obsessed with cricket) and watch it on TV with her, to get into the swing of things, so to speak. I then had to brainwash myself afterwards to forget the rules!" However Gary did have a happier story to share about Audiogenic's rugby games "Denton Designs developed *World Class Rugby* for Amiga and Atari ST, and then it was ported to consoles. For each trade show I would create a demo show reel that we would play for publishers and during meetings with Japanese and American publishers we naturally went to fast forward through rugby as we assumed it would not be of interest to those countries. Much to our surprise, we started getting quite a lot of mail order requests for rugby on Amiga/ST/PC from the USA. What we didn't realise was that rugby is played a lot in US military academies, so it sold pretty well. Even more surprising was that it was published for the SNES in Japan, as there were apparently over 1100 teams in various Rugby leagues over there!"

Like many software companies of the time Audiogenic began to feel the effects of the ever-changing market that was starting to point all its focus towards big budgets and huge development teams. This prompted Peter to re-evaluate the company and decided to sell some of its assets to Codemasters. "Our first contact with Codemasters came when they published *Brian Lara* for the Sega Mega Drive," Peter reminisces."I'd originally done a deal with Virgin, but Sega Europe wouldn't let it publish the game because cricket wasn't popular in other European countries, so I went to Codemasters, which wasn't subject to such restrictions. In 1996 the cost of developing and marketing new games had risen from hundreds of thousands to millions and I realised that a small company like Audiogenic couldn't compete on its own. I liked and respected Richard and David Darling, so they were the first people I went to." After this Audiogenic continued to exist purely as a vehicle to license out its remaining IP, as it still does to this very day. Audiogenic's best days might be behind it but there no doubting that they played a pretty big part in many people's childhoods. ✱

» [Mega Drive] The first game to come from the relationship between Audiogenic and Codemasters, *Brian Lara* was a very successful cricket game based on the earlier *Graham Gooch* title.

Special thanks to Peter Calver, Patrick Fox, Gary Sheinwald, Gary Partis and Darryl Still.

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Enduro Racer

CHRIS HILL REVS UP FOR A WHEELIE DOWN MEMORY LANE...

» MASTER SYSTEM » SEGA » 1987

So picture this – there I was in the late-Eighties, having just become a teenager and the world was at my feet. It seemed like anything was possible, and nowhere was that truer than in the world of gaming, which was seeing plenty of new changes. I had gone through three or four different ZX Spectrums at this point and played many a game, but over the Christmas of 1987 my best mate got something truly amazing – the Sega Master System.

For hours I used to watch him play *California Games* with his one controller, furiously drinking coke and scoffing crisps before handing me a sticky controller for one game of footbag. Then it was back to him hogging it again, whilst I watched in envy. Clearly, I put my mind to obtaining a Master System of my own.

Begging, saving and working a paper round eventually led to a purchase – I visited Woolworths in 1988 brought myself the coveted Sega console plus two games, one of which was *Enduro Racer.*

This was no arcade equivalent. In fact, after pulling wheelies on the real deal, at first it was a real let down to me. However as I spent time trying to improve my wheelie skills and shifting left to right on the track having remembered the sequences, I learned to love this isometric gaming classic. Once you mastered the game, it was over fast – less than about eight minutes, actually.

It's fun for a quick play and for the nostalgia, and also great value for your money – it cost about £20 at the time! For me, *Enduro Racer* is a game that brings back great memories. ✱

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The History of Broken Sword

» [PC] This is it: the key to the first game. The Knights Templar are introduced.

» [PC] Paris is as much a character of *Broken Sword* as the eccentric and varied bunch which George and Nico come to interact with.

» [PC] Nico's friend André Lobineau is treated with suspicion by George and appears in the first three games.

Broken Sword

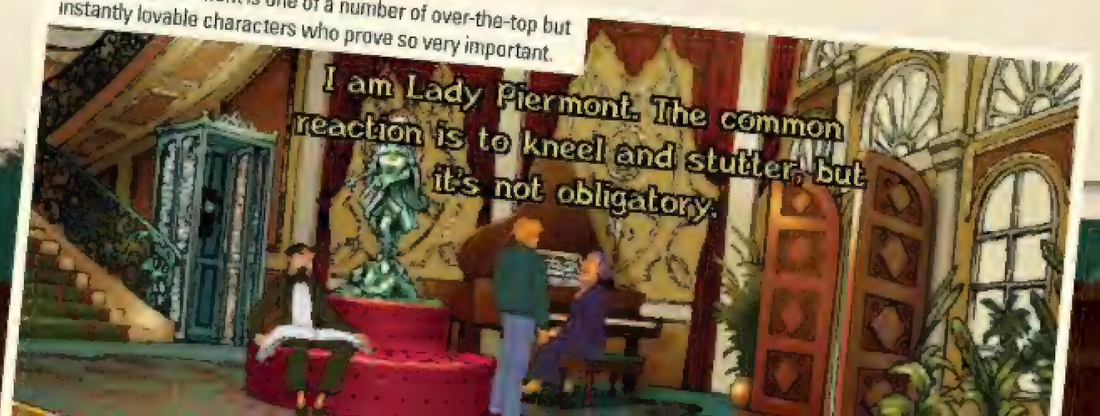
» [PC] George finds himself in yet another sticky situation, hiding in a wardrobe.

It was set to be a trilogy but with five Broken Swords under his belt and thoughts of a sixth instalment swirling in his head, Charles Cecil tells David Crookes why the series continues to inspire him

There is a comment which George Stobbart, the star of the *Broken Sword* series, hears very often as he travels to the ends of the Earth and delves deeper into whatever mystery he happens to stumble across. "Get out of there," he will be warned as he pokes into business others would rather he did not. George's response can be quick and to the point, his brain whirring overtime: "I can explain everything," he will say. And invariably he does, spilling all about the intricacies of what he has discovered in the hope of finding out more.

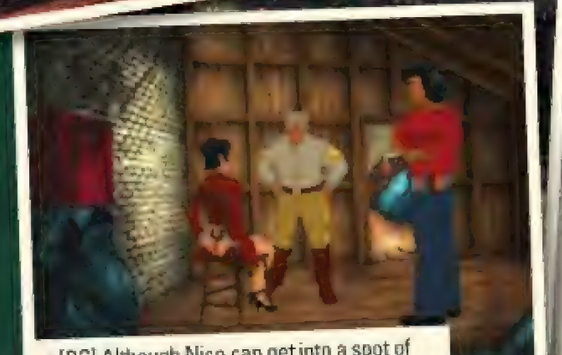
Charles Cecil, the producer of *Broken Sword* and the co-founder of Revolution Software, may well want to dissuade us from drawing parallels between George and himself, but it has to be said that some similarities do exist. When Charles gets a bit between his teeth on a subject, he throws himself into his research, forever uncovering new and juicy details that can be entwined into plots of his award-winning globetrotting series. When asked to discuss *Broken Sword*, he also seeks to explain everything, gushing with stories arguably more interesting that those within the game itself.

The *Broken Sword* tale began in 1994 following the incredible success of *Lure Of The Temptress* and *Beneath A Steel Sky*, two point-and-click adventures that brought two unlikely fellows together and immersed gamers in a rich and detailed environment. Charles was looking for a fresh idea for what would be Revolution's third game. "I loved the idea of something with hieroglyphs and I wanted to design an adventure game based around that," he says. But Sean Brennan, who had initially backed Charles while at Mirrorsoft, ▶

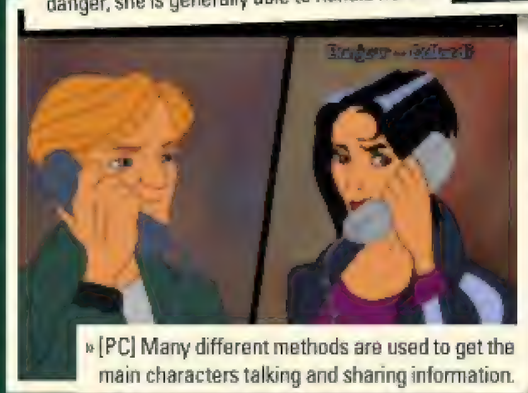


» [PC] Lady Piermont is one of a number of over-the-top but instantly lovable characters who prove so very important.

» [PC] Although this looks rather daring, in the first two games movement was strictly by pointing and clicking – there is no chance of George falling.



» [PC] Although Nico can get into a spot of danger, she is generally able to handle herself.



» [PC] Many different methods are used to get the main characters talking and sharing information.

▶ said Egyptian games didn't sell. "Very wise words and I'm sure he's right," Charles concedes.

Sean had a lot of faith in Revolution and he had become good friends with Charles. Mirrorsoft had collapsed shortly after Robert Maxwell was found floating in the Atlantic Ocean 15 miles from his boat on 5 November 1991 and Sean had subsequently moved to Virgin. He took *Lure of the Temptress* and *Beneath A Steel Sky* under his wing and had enjoyed the success they had brought.

For a third game, Virgin decided it would be right and proper to throw resources at Charles and it was during an evening meal in a restaurant in the King's Road, Chelsea, that an idea began to emerge. "Sean had just read a book called *Foucault's Pendulum* by Umberto Eco and he talked about the Knights Templar as antiheroes," says Charles. "I'd heard about the Knights Templar but I knew very little about them. Yet the more he spoke, the more the idea of involving them in some way felt right."

Foucault's Pendulum was a fictional yet encyclopedic detective novel laden with conspiracy theory. It wasn't an easy read but the story of a search for a group of men seeking the power of the Earth struck Sean since it mixed mystery and adventure with conjecture and hypothesis. What's more, the narrator, Dr Causabon, was a specialist in the Knight's Templar, that Christian military order which flourished during the Crusades and which many believe continues to operate underground. Together with *The Holy Blood And The Holy Grail* – an influential book by Michael Baigent, Richard Leigh and Henry Lincoln published in 1982, which hypothesised that Jesus had married Mary Magdalene and that her womb and subsequent royal bloodline formed the legendary Holy Grail – Charles had sufficient reading material from which to contrive a twisting, brain-teasing game plot.

"The authors discussed this concept called the Priory Of Sion which was genius," Charles says, citing French draftsman Pierre Plantard de Saint-Clair who set up the Priory Of Sion hoax in 1956 and perpetrated it in the Sixties. "I think Plantard felt inadequate and wanted to show off to his friends and he came up with numerous secret societies including Priory Of Sion. His genius was to put some secret forged documents in places such as at the Bibliothèque Nationale De France in Paris in the hope that someone was find them. I don't think in his wildest dreams he could have hoped that Baigent, Leigh and Lincoln would have stumbled across them."

Charles began to develop the game. Steve Ince became the project producer, Dave Cummins and Jonathan Howard the scriptwriters and James Long the lead programmer. Tony Warriner was enrolled as the system programmer and David Sykes created the

» [PC] The humorous way this puzzle is resolved – by slipping Tequilla into Laine's wine – is typical of the *Broken Sword* style.

By George

We talk to actor Rolf Saxon who has voiced George in every official Broken Sword game

How did you get the job of voicing George?
I went to drama school with the very first Nico, Hazel Ellerby. She had been cast and they were looking for George so she suggested me. I had a meeting with the first director in Covent Garden and he pretty much offered me the job there. It was an usual job because it was really early days for this kind of thing.

Was it a tough job?
The first game was huge. I was booked for five, eight hours days but it was close to six 12 hours days and they booked me for a second week for the same amount of time. I got the first section of script and it was something like 200 pages. That was about a third of it.

Pretty exhausting, then?
There was so much dialogue because we had to have the game ready for a variety of choices that the player could choose. You would have George pick something up and have ten different options available and you had to give hints that are not to big or small. But the fun was in joking around. When players repeatedly picks up an object that he or she has been already told is not going to do anything, they are obviously stuck. So to avoid frustration we'd say something funny. We took the piss sometimes but otherwise it was a tone of voice kind of thing.

Was it hard to get the right voice?
I had an idea for George that was very different but I realised it would be difficult to maintain a voice. I would get tired or slip. So I ended up using my own.

Do you act in isolation or with other actors?
Some are in isolation but when there is a lot of interaction with the other characters, it's always best to be surrounded by the people you are working with. There have been occasions due to scheduling problems that I've had to record a scene and the other person had to record their section later and there's no leeway for altering something it's down and done and dusted. Sometimes it's not the best so it's best done working together.

Charles voiced a character called Gehnen in *Broken Sword 5*: how did he fare?
He was great. I have been asking him for years but he would never do it. He was so nervous and he didn't want to let [us] down. He didn't want people saying, 'That game was good except for that one dude, who the f**k was that!?'. If it had been terrible, we'd have said, look, that was a great idea but it's not going to work but he knows these characters upside down and backwards.

» Rolf Saxon.

» [PC] Each game has multiple locations and it is always easy to travel between them.

> **"I'd heard about the Knights Templar but I'd heard very little about them"**
>
> Charles Cecil

game tools. Stephen Oades was animation director and a talented cartoon house called Red Rover in London was responsible for character design. "I had also once regularly played cricket with the composer Barrington Pheloung and I got in touch again," says Charles."

As Charles investigated the Knights Templar, he delved – literally – well below the surface. "All of these amazing elements span off," he said, "and I was going down into the sewers and the catacombs beneath Paris. There is one area where there are millions of bones buried; skulls and thighbones neatly put together. They were once in a burial ground under the Saints Innocents church which was next to the food market of Les Halles but it was overflowing and they had to be moved. It's extraordinary."

Paris had long captivated Charles. "England was really poor in the Sixties and Seventies and London was grey and drab," he recalls. "Paris was smart. People walked differently and they wore brighter clothes. You sat in restaurants and ate amazing food. The mythology of Paris and *Broken Sword* came from that imagery of my younger days and I wanted to draw in real-life locations." The decision was to start the game there and so the team came up with some crude artwork ("What Steve Oades could do with pixels was unbelievable," says Charles).

To bolster the art team, Charles visited Ballyfermot College of Further Education in Dublin. "It was regarded and a feeder school for the Don Bluth studio in the city. I went over and met a number of the professors and lecturers and one in particular, Eoghan Cahill, showed me some of his layouts and they just blew me away."

Eoghan was feeling a bit fed up and said he would be interested in working for Revolution on what would become *Broken Sword: The Shadow Of The Templars* (and *Circle Of Blood* in the US). Charles snapped him up. "He used to drive people around the twist, saying why can't you do this and that," laughs Charles. "The team never had a good reason why they couldn't and he was always trying to push the boundaries. Half the team felt this was irritating but I loved him even if he did talk a lot. He changed the dynamics of *Broken Sword*."

The game revolved around American tourist George Stobbart and French journalist Nico Collard. Together they sought to discover the reason why a clown stole a briefcase outside a Parisian cafe and replaced it with a bomb and the scenario was set up with a stunning intro featuring a crow's eye, Barrington's music and George's voiceover. "If you climb up the Notre Dame and look to the main entrance, round to the left there is an area that lets you climb up to the bell tower. Well, just before you get to the bell tower, that is the view we took for *Broken Sword* with the gargoyle on one side and the view overlooking the River Seine," says Charles.

Upon the discovery of an ancient manuscript, a tale involving the Knights Templar began to unravel. As the player clicked around, speaking to characters, viewing items, and using objects to solve the various puzzles that make the game ▶

» [PC] Animations are generally fluid with the cartoon-look being one of the reasons for the series' success.

A HISTORY OF BROKEN SWORD

Riddle Me This

Five varied puzzles from the series and how to complete them

THE START

■ Charles Cecil says the beginning of the first game is most crucial to the whole series when George has to make his preliminary enquiries with regards to the clown killer. "I like the way he pieces it together," he says.

SOLUTION: Within a hole in the sewer, the player finds a red nose, a tissue and a piece of cloth. George works out where the clown got his clothes - showing the cloth to an old man gains the number of the clown's tailor.

GOAT PUZZLE

■ Also in the first game, a tied-up goat sits near the entrance to an underground dig, butting George whenever he reaches it. This puzzle was simplified in the Director's Cut but it caused many headaches originally.

SOLUTION: When it butts George and turns away, George must quickly activate some farm machinery. He will be butted again but the goat gets caught in the machinery. George is able to go on his way.

DUNKING THE DOG

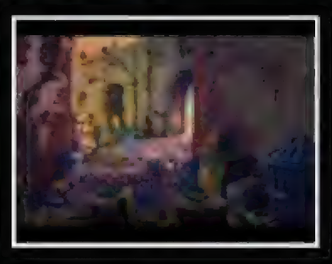
■ The second game features a frustrating and pesky little canine which deters George from climbing a fence and getting to another part of the Marseilles docks.

SOLUTION: George must entice the longshoreman away from his hut. Entering via trapdoor and grabbing some dog biscuits, the dog is encouraged to walk on a flip-up platform. A boat hook is used to dunk the dog into the water. Take that!

FLOOR TILE ROOM

■ As if to underline the rather different direction *Broken Sword* had taken with the third game, this floor tile room eschews the game's puzzle solving. It requires Nico and George to step on certain tiles.

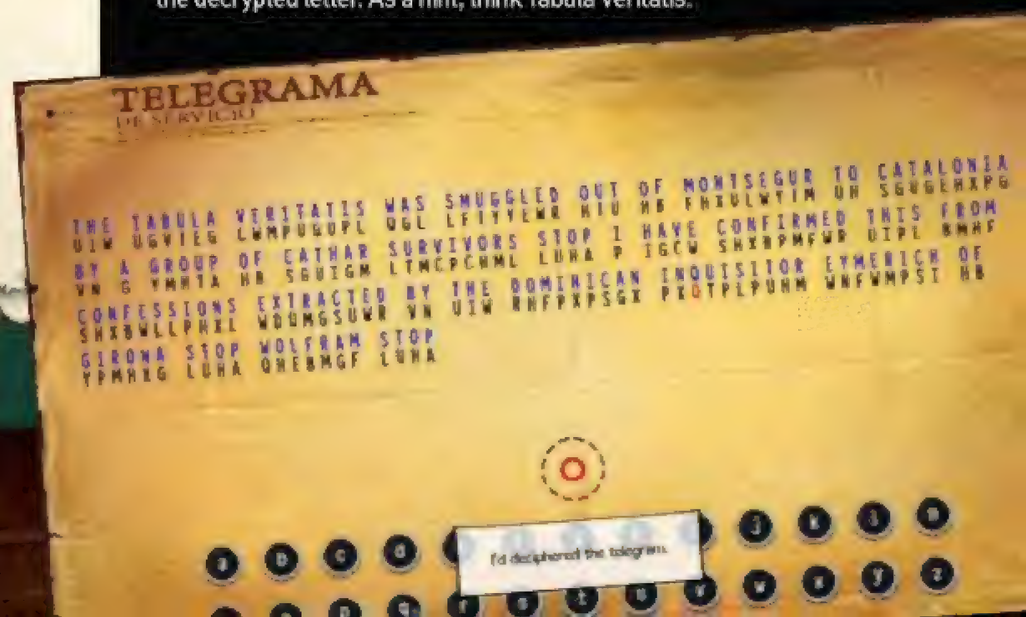
SOLUTION: Start with getting Nico to stand on the fish tile and then see the fish tiles light up. These are the ones George can walk on. The next tile for Nico is the Scorpion tile. We'll leave you to decipher the rest.



THE TELEGRAM

■ In the final game, there is a telegram that must be deciphered. It's rather good fun seeing the meaning appear before your eyes with a little bit of code-breaking.

SOLUTION: Click on a letter in the note and then click a letter on the bottom of the screen that you think corresponds with the decrypted letter. As a hint, think Tabula Veritatis.



Globetrotting George

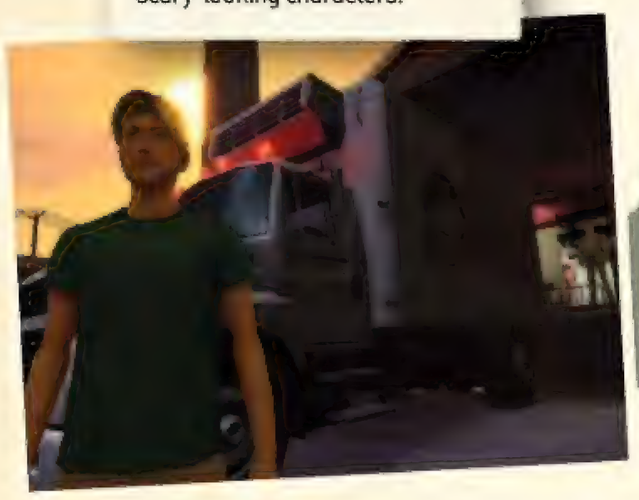
Broken Sword's hero has had adventures all over the world

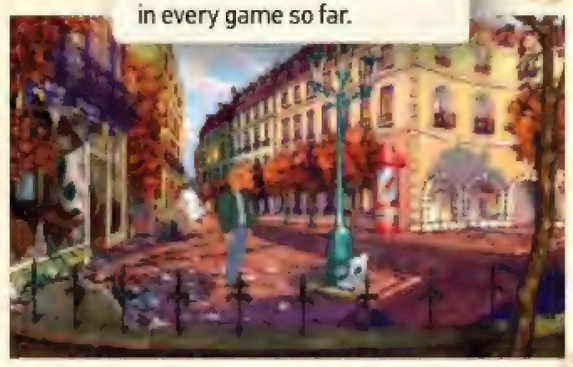
SCOTLAND

■ Charles visited St Ninian's Chuc… close to the site of the Battle Of Bannockburn near Stirling in Scotland. George checks it out too.

USA

■ For the first time, we see George in his own country as he begins the fourth adventure in New York City. He comes face-to-face with some scary-looking characters.





FRANCE

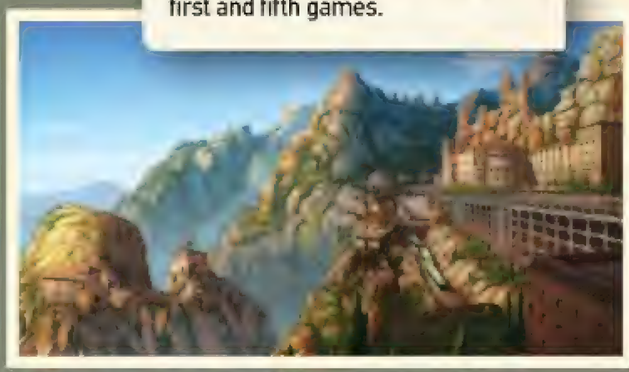
■ France is where *Broken Sword* began and, thanks to Nico, it has been integral to the series since. It is featured in every game so far.

QUARAMONTE

■ It may not exist but this Central American town sure looked nice and George was able to meet a nice tourist couple he previous bumped into in Syria.

SPAIN

■ From the 250km Mediterranean coastline of Costa Cálida, Mucia to Catalonia, George visits Spain in the first and fifth games.



THE CARIBBEAN

■ An exotic location for George as he searches for one of the stolen Mayan stones in the second game.

▶ so involving, not only did the narrative drive forward but gamers were treated to some delicious dialogue.

Charles' role was to design the puzzles and the story and he drew inspiration from his own family. George's visit to Lochmarne in Ireland is included because the brother-in-law of Charles' wife, Noirin, lives in a town in west County Limerick called Newcastle West. "They have a Knights Templar castle there," says Charles, who changed the town's name to make it sound more Irish. Indeed, Charles' family history is infused within the game, making it a very personal title for him. "My uncle fought in the Portuguese civil war and when I was around ten or 11 my mother took me to Paris and we stayed with him. He was a revolutionary and a communist who escaped. I named the Countess de Vasconcellos [a Spanish aristocrat within the first game] after him and my aunt when they married."

Other characters have real-life counterparts too. "My wife and I went to see a friend in Paris and the concierge we met was friendly until he realised we were English," recalls Charles. "It was as though we had done the most appalling thing, so he became Albert the House Custodian." On the way back to the airport, Charles became caught in a traffic jam. "There was a policeman directing traffic and everyone started hooting. In the end he threw his hands up in the air, sat down and ordered a glass of wine. The traffic cleared itself quickly." He was the inspiration for the gendarme who was seen in the premises of Montfaucon in Paris in the first two *Broken Sword* games. "The richest characters are the ones based on somebody and the weakest are those we think will fit a puzzle," confesses Charles.

As for George and Nico, their creation was more pragmatic and based on the idea that players get enormous benefit from two characters that talk to each other. "You can convey the exposition," Charles explains. But why an American and a French woman? "Well it was set in Paris so one of the characters had to be French and it was really a case of what the best

ENGLAND

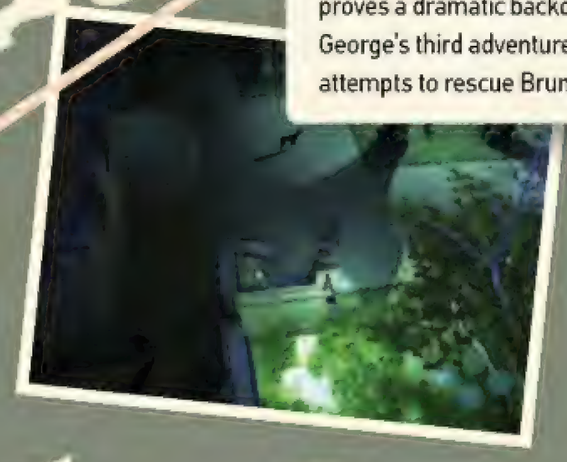
■ George sets foot on Revolution Software's home turf, visiting London and Glastonbury in three of the games.

IRELAND

■ George hotfooted it to Ireland after leaving Paris in the first game and he ended up in the fictional village of Lochmarne – coming face-to-face with a goat.

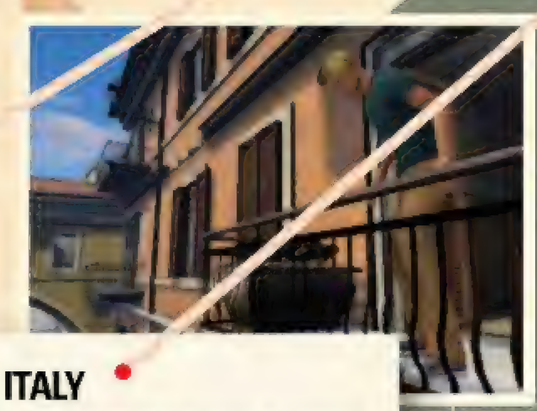
CZECH REPUBLIC

■ Prague and a large ancient castle proves a dramatic backdrop during George's third adventure as he attempts to rescue Bruno.



SYRIA

■ Not only does a cool kebab seller live here but George discovers it was home to a member of the Hashashin assassination cult.

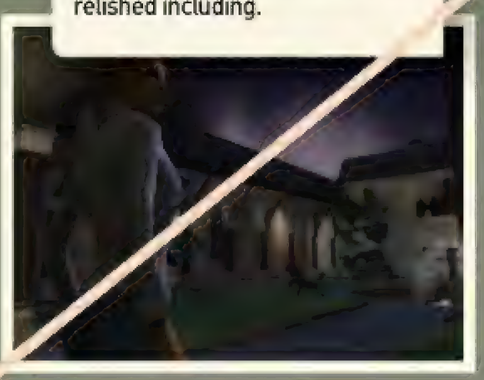


ITALY

■ Rome provides a slice of action for George and Nico in their hunt for Anna-Maria Press who is involved in the Angel Of Death Conspiracy.

TURKEY

■ With a visit to Topkapi Palace, Istanbul is a stunning location in the fourth game and one Charles relished including.

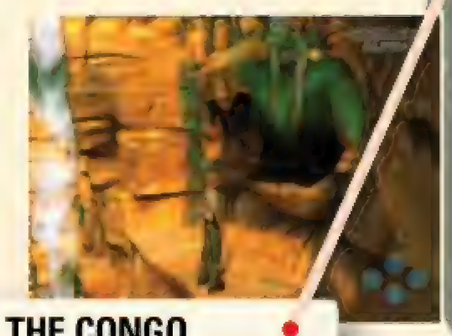


IRAQ

■ With Charles fascinated by the location of the biblical Garden Of Eden in Iraq, the final game in the series has George quipping to Nico, "If you see any apples think twice before you eat them."

EGYPT

■ With a map of Egypt and Nico in tow, George heads the Armillary and has to navigate past some guards and their dogs.

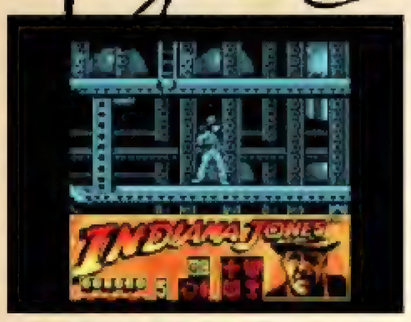


THE CONGO

■ As he flies in treacherous weather with a drunken pilot, a more confident George finds the heat is on in The Congo.

Knights Templar

Five more games that use the Templar history



■ **INDIANA JONES AND THE LAST CRUSADE**
CPC, 1989

■ **DARKLANDS** PC, 1992

■ **CLIVE BARKER'S JERICHO** PC, 2007

■ **ASSASSIN'S CREED II**
PC, 2009

■ **THE SECRET WORLD**
PC, 2012

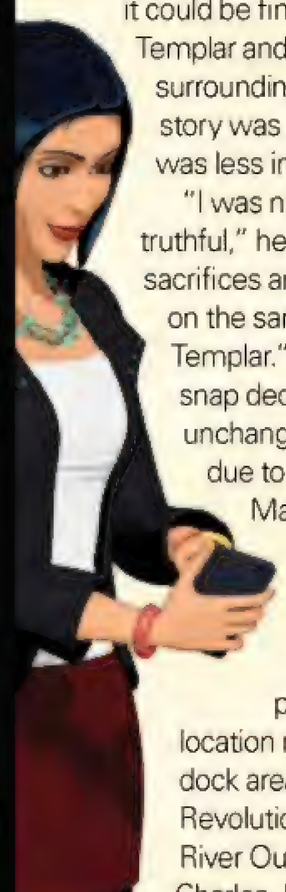
The missing Broken Sword

A look at Broken Sword 2.5

Three years after the release of *Broken Sword II*, a group of fans were eager to see the story continue and so they created their own sequel, picking up from where the official game left off. The first screenshot of the game was posted online in 2002, a year before *Broken Sword 3* heralded a return of the series. Rather than give up, the fans continued, deciding to call their game *Broken Sword 2.5*. They were assisted with assets handed over to them by Revolution Software.

A German-language version in a 2D-3D hybrid (3D cutscenes, 2D in-game) was finally released in 2008 with English subtitles available and English voice acting later patched. It told the story of George receiving a message that Nico is dead only to discover, upon flying to Paris, that she was very much alive. Upon discovering she has been accused of murdering the city's mayor, the pair attempt to clear her name.

The adventure was fantastically animated and director Daniel Butterworth did well making the game as faithful to the main series as possible. Stan Burdman rather than Rolf Saxon voiced the English George which did feel rather odd and some of the writing was stilted and far too matter-of-fact. Yet in creating the game, it showed the immense love the fans have for the series. The game is still available to play for free at brokensword25.com.



▶ juxtaposition would be; the best character as the foil. So we went for a sassy French woman and the opposite: a laid back Californian who had just flown in. Clearly a lot of the story and the puzzles came directly from the differences between the two and how they worked with each other."

The success of the first game in 1996, give or take the odd bad review (*PC Zone* slated it since it had been handed an unfinished copy) ensured a second would be created. But *Broken Sword II: The Smoking Mirror* was rushed since Virgin said it would only back the game if it could be finished within a year. Out went the Knights Templar and in came another intriguing mystery surrounding a Mayan stone uncovered by Nico. The story was set six months after the first but Charles was less intrigued by the plot.

"I was not as interested in the Mayans, if I'm truthful," he confesses. "Clearly Mayans, human sacrifices and so on are interesting but they were not on the same level of passion for me as the Knights Templar." The short development time forced snap decisions on a team that was pretty much unchanged from the first. "The puzzles were easier due to time but there were nice ones, around Marseille," he says. "Ultimately you want to create scenarios with a big pay off where the puzzles are solved and come together to drive the story forward."

Shortcuts were made. It was not possible for Charles to carry out a full location report on Marseille so the cranes in the dock area of the French city were inspired by Revolution's home town of York. "We looked at the River Ouse and studied the bridge in York," says Charles. Likewise, the Caribbean was a product of what Charles says as, "A time before we had children when we felt rich" even though Charles and his wife had actually gone to the Seychelles. "There was pressure to finish the game."

Even so, like the first game, *Broken Sword II* was also developed for the PlayStation. Revolution had built a strong relationship with Phil Harrison at Sony who had shown the company the PSone prior to its UK launch. It was Sony rather than Virgin which published the games (Virgin having shown Charles *Creature Shock*, telling him that was the kind of game PlayStation gamers wanted). The move was shrewd. The first game was handed a 9/10 score from the *Official PlayStation Magazine* which sold 500,000 copies. "The PlayStation was good for us," says Charles.

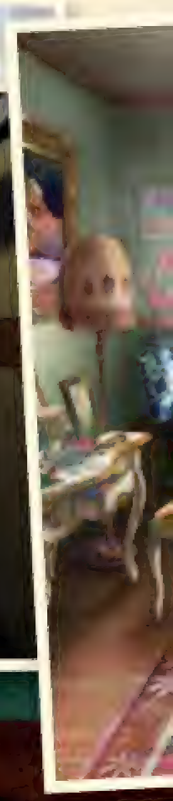
"I encouraged the writers to come up with their own puzzles. I should have seen the danger in this"
Charles Cecil

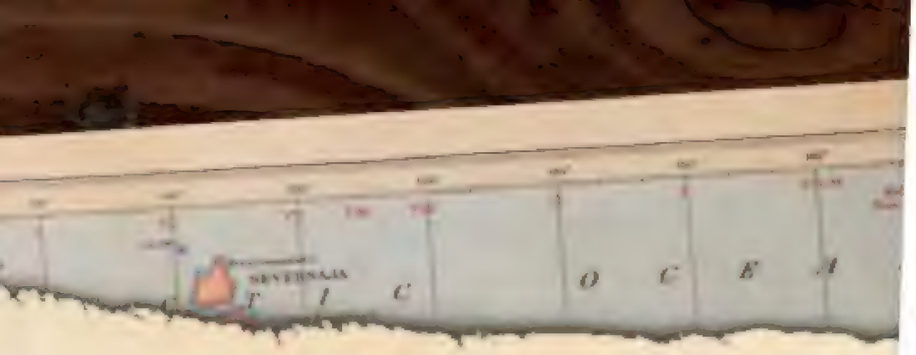
But by the time the sequel was published, gaming was changing. "The good and the great decided adventures had their day," says Charles. So *Broken* Sword took a six year hiatus and when it returned it looked very different since it moved to 3D. Just as important, though, Charles had ensured the neo-Templars were involved again.

"It's funny, actually, but there has been much serendipity when it comes to the Templars and myself," he says. Indeed, when Charles was canoeing in the Dordogne with his son while his wife explored a tiny village called Floirac, she entered an art gallery. "There was a book there with the Knights Templar symbolism on the front so she picked it up and the art gallery owner went over to her, asking why she had an interest. He was a guy called Jean-Luc Chaumeil who had interviewed Pierre Plantard in the Seventies and realised he was a total fraud. We had kind of stumbled on the world expert of the whole Priory Of Sion in this tiny little village in the middle of France. Unbelievable."

Charles was feeling more comfortable with the story and there had been much time to hone it. The team knew their exact position on the Templars this time around. "Until quite late with the first game, the baddies

» [PC] Martino's Meat Package Company provided some memorable – and bloody – moments.





were going to be the Templars but my mother warned me against it," says Charles. "She said I liked the Templars so why have them as the bad guys? She was absolutely right. I changed them to neo-Templars and that gave George the opportunity to question them and say that they didn't stand for Templar values at all."

Charles' mother, Veronica, helped in other ways. As a child, Charles often heard about how she had left the UK at the age of 25 with his father who was pursuing a career at a large multinational company in the Congo. The family, with 11-month-old Charles in tow, had to escape a bloody revolution. "So the idea of going back to the deep Congo was inspired for the setting in the third game." (Veronica wrote a book called *Drums On The Night Air: A Woman's Flight From Africa's Heart of Darkness* about the experience).

All of this combined to make *Broken Sword 3* an ambitious game, not least because the 3D camera lent it a cinematic air. Revolution went all out, thinking it would be the last part of a trilogy ("That's why we have the overdramatic end and George wielding a sword"). But it wasn't as fluid an experience as it could have been both for the players and the developer.

The number of box-shifting puzzles upset a good many fans. They started well with George involved in a plane crash and needing to move boxes to the back of the plane. But it became an overused mechanic. "It worked well in the plane and for the puzzles involving pads that closed doors but because we had the graphics, I encouraged the script writers to come up with their own box puzzles. I should have seen the danger of this: it resulted in really long-winded box puzzles that took players ages. It slowed things down."

At the same time, Revolution's relationship with THQ had broken down. "THQ made a profit of a few million dollars on the third game and we made quite a substantial loss. The company promised one thing and then reneged so the budget was tight." By the time thought was given to *Broken Sword 4*, Revolution was in a weak position. Charles enlisted Sumo Digital but the game was underfunded. Sumo pumped lots of its own money into it and used their own tech to keep costs down. The result was still a poorer game than previous.

"Any problems with the game are to be laid at me as designer and the tiny budget," Charles says. Released only for Windows and retaining its 3D setting, *BS4* used Sumo's Emmersion engine and it was high on action. "I loved the idea of using Istanbul; a magnificent city," Charles says. "I didn't know Topkapi Palace which we used in the game but I've subsequently been there. I went to Göbekli Tepe, a 15,000-year-old temple, a couple of years ago and it felt like the Garden Of Eden but we were near the Syrian border and you could see clouds of dust from the bombings. This influenced *Broken Sword 5* but for that game we moved the action to Iraq which we felt made more sense."

By the time the game was released, Revolution was in big trouble. It had lost a lot of money and had a bank loan which was to take ten years to pay off. *Broken Sword 3* earned THQ $5 million profit but, "The funding model was so broken and screwed up that we got a percentage of seven per cent of the retail price against development cost, localisation and QA and it was never recouped," says Charles. "We had debts of several hundreds of thousands of pounds and that just got worse at the end of *Broken Sword 4*."

Revolution sought ways of staying afloat. It forged a good relationship with Ubisoft and worked on Director's Cuts of the first *Broken Sword* games for the DS and Wii in 2009 and 2010 (Revolution already had experience of Nintendo consoles having converted the debut title for the Game Boy Advance in 2002). The DS in particular taught Revolution how to use a touchscreen which came in handy when Apple came calling.

"We got fantastic support from Apple and the game on the iPhone did really well," says Charles. "We were able to get back into the black again and earn money against our overdraft." A big break came when *Broken Sword II: The Director's Cut* was released. Apple asked to include the first game as part of its 12 Days Of Christmas promotion and more than 2.5 million copies were downloaded. The next day, sales of *Broken Sword* rose six-fold. *Broken Sword 5* was on the agenda.

Charles turned to Kickstarter to raise the cash and the company dealt directly with fans. "Like I did in the Eighties when I was writing my first games on the ZX81." It went back to its 2D roots, opening in Catalonia, Spain, and based on a stolen painting that unearthed yet another mystery, this time referring to the Gnostics. "I knew straight away what I wanted for *The Serpent's Curse*: George and Nico back and looking the same as before, hand-drawn backgrounds that were rendered and a good level of humour," says Charles.

The game was released in two parts, the first in December 2013. *Broken Sword* was back and now there are plans for even more. "With *BS5* we promised a traditional adventure, brought up-to-date and made to feel contemporary," says Charles. "I have ideas for *BS6* and there will be one." But will he explain everything? "When the time is right," he laughs. ✱

Broken Sword: The Movie

You'll have to keep waiting...

Talk of a film has rolled on for years but it would appear George Stobbart and Nico Collard are not likely to appear on the silver screen any time soon. "When we talk to people, they ask for the base story but I don't have one," says Charles. "I want to write new games and if I could give the scriptwriting duties to someone and trust them, I would. People are waiting on me and it's my fault."

If a film did go ahead, Rolf Saxon has ruled himself out of playing George. "I'm way too old, I'm not blond and no way I would be cast as George in a film," he says. "I'd be a cameo as George's father." But he admits it would be odd seeing someone else play the character he has worked with for close to 20 years.

"Invariably there would be times when I'd say that's not the way I would have done it, but they'd be careful about who they chose," he adds. "If somebody else was playing George then I think I would be working with him to a certain extent."

» [iOS] *Broken Sword 5* provided some tender moments such as when Bijou wishes to dance with her dead husband Henri and George assumes his role.

» [iOS] The fifth *Broken Sword* was paid for using Kickstarter funds.

Peripheral Vision

Nintendo 64 controller

» **PLATFORM:** NINTENDO 64 » **RELEASED:** 1996 » **COST:** £8+ UNBOXED (€15+ BOXED)

One of the first things you'll think when viewing Nintendo's controller is, "How on earth am I going to use that?" It's arguably one of the most intimidating looking controllers for a mainstream console, mainly because of those three prongs, which make you question where you should actually hold the thing. There's no real right or wrong way of course (although we prefer ignoring that middle prong most of the time). Some games certainly work better than others (most obviously Nintendo's own titles) but, regardless, it's a surprisingly comfortable controller to use.

Continued practice helps and after a little time the positions of some of those out of the way buttons (particularly the Z trigger) begin to make perfect sense. Like the Dreamcast pad, it's crying out for an actual second analogue stick, but the C buttons do work surprisingly well. Some first-person shooters even allowed you to use two pads so you could have access to two analogue sticks (it also works brilliantly with *Star Wars Episode I: Racer*). It can even handle Rumble Paks and Controller Paks, making it one of Nintendo's most surprising and versatile pads. Once you actually get used to using it... ✱

N64 Controller Fact

■ Nintendo partnered up with LodgeNet in 1997 and released a distinct controller for various hotels in the United States. In addition to allowing you to access numerous games, it could also act as a TV remote.

ESSENTIAL GAME

Super Mario 64

Few games highlight the versatility of the N64's unique looking controller as well as *Super Mario 64*. Mario not only gains access to a large number of exciting new moves; but controls brilliantly too, creeping around corners or running over short distances with ease. It not only does its best to highlight all the main aspects of Nintendo's pad, but also justifies the price of the unit itself. A stunning example of a triple-A launch game that's still one of the best examples of the genre.

AS THE FIFTH NUMBERED INSTALMENT OF THE FRANCHISE HITS THE SHELVES, STEVE HOLMES JOURNEYS TO SHADOW MOSES TO TAKE A LOOK AT THE BEVY OF GROUNDBREAKING FEATURES THAT MADE UP ONE OF THE MOST SPECIAL VIDEOGAMES EVER MADE

METAL GEAR SOLID

There absolutely had to come a time when videogames became like movies. We're desensitised to it now, having experienced the explosive set-pieces of *Uncharted*, the masterful pacing of *The Last Of Us* and the grandiose narratives of games like *Heavy Rain*, but another game hit all three of these buttons and did it a long time ago. In *Metal Gear Solid*, achieving a cinematic effect didn't reside solely in graphics, voice acting or cinematography, but in a glorious cocktail of all of these individual facets and more that resulted in what is still one of the greatest overall presentations of all time.

Coming off the back of two *Metal Gear* titles for the MSX, Hideo Kojima and his team had endeavoured to develop *Metal Gear 3* for the 3DO in the mid-Nineties after the release of *Policenauts* for the ill-fated multimedia console, but development was soon shifted to Sony's PlayStation. The intention was to build a truly cinematic stealth experience that would garner the reputation of being the greatest PlayStation game ever made, and looking back at it now – to play it again, slowly and thoroughly, after all these years – really does encourage that way of thinking. This was a game that was light years ahead of its time back in 1998 and still offers a more accomplished and considered experience than most triple-A games since.

From the very start, Kojima's desire to create a videogame that bore all the hallmarks of a movie is apparent, as Solid Snake infiltrates Shadow Moses island to prevent a terrorist cell from launching a nuclear weapon. The terrorist group, made up of ex- ▶

PIXEL PERFECT

One of the best things about Metal Gear Solid was its vast array of weapons and items you could use

CARDBOARD BOX

RATION

CHAFF GRENADE

CIGARETTES

FAMAS

SCOPE

STINGER

DISK

PAL CARD

"This was a game that was light years ahead of its time back in 1998"

LES ENFANTS TERRIBLES

The games that followed

METAL GEAR SOLID 2: SONS OF LIBERTY *2001*

■ *The most derided MGS game caused quite the stir when it was released, by shelving Snake as a protagonist for new guy Raiden.*

METAL GEAR SOLID 3: SNAKE EATER *2004*

■ *Many people consider Snake Eater to be the best game in the series. The mechanics were miles ahead of anything on PS2.*

METAL GEAR SOLID 4: GUNS OF THE PATRIOTS *2008*

■ *After learning that he has little more than a year to live, Snake takes on one final mission – the assassination of Liquid Ocelot.*

METAL GEAR SOLID V: THE PHANTOM PAIN *2015*

■ *The Phantom Pain is set in an enormous open world and sees Big Boss embark on a path of vengeance through Afghanistan.*

GAS MASK

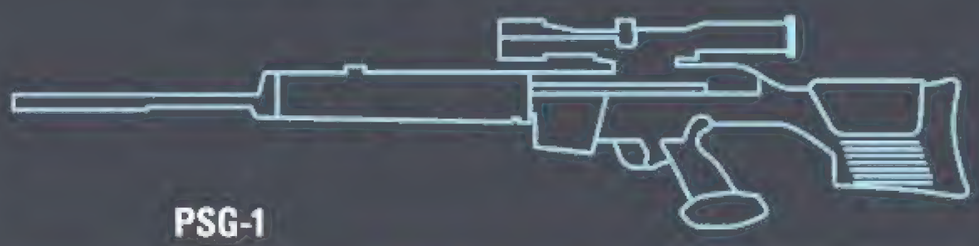
MINE DETECTOR

C4

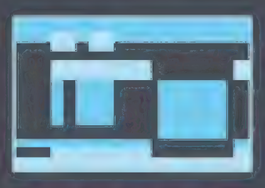
KETCHUP

NIKITA

GRENADE



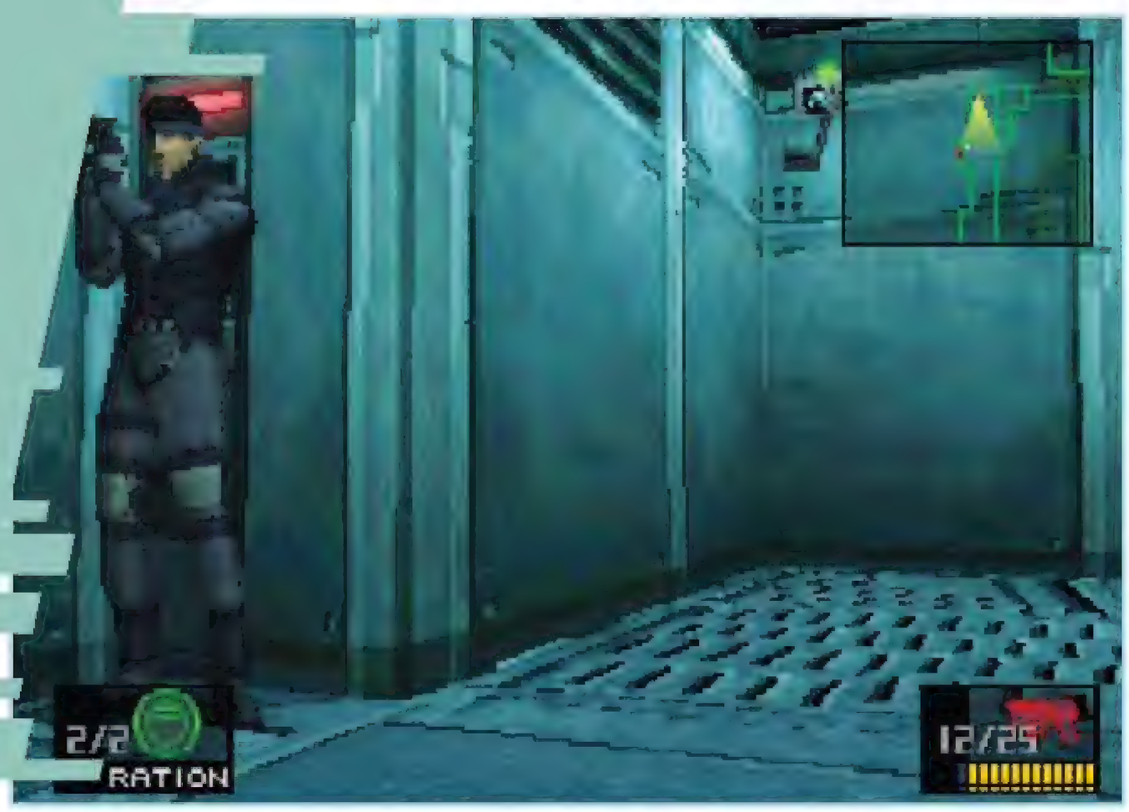
PSG-1



KEYCARD

STUN GRENADE

SOCOM



» [PlayStation] Cameras are everywhere, but thanks to your Soliton Radar, they're easy to avoid with patience.

» [PlayStation] Much of the story exposition in *Metal Gear Solid* takes place during Codec conversations.

"Even though you're playing from what is effectively a top-down perspective there's a tangible sense of control to what you're doing"

▶ members of the special forces group FOXHOUND, are demanding delivery of the remains of Big Boss, a legendary war hero that Solid Snake defeated with a makeshift flamethrower at the end of *Metal Gear 2*. It's a quintessential action plot, really, and it's only later on that you start to feel the narrative flourish into a web of interwoven plot lines, character relationships and government conspiracy. Only *Metal Gear Solid 3: Snake Eater* has managed this clarity of storytelling since, when you look at the rest of the franchise. As for FOXHOUND, it still stands as a truly memorable rogues' gallery with a varied roster of boss fights that required a different approach and different items to best.

Graphics were considered to be pretty decent back in the day but, alas, as with most polygonal games of that era, it looks rather dated now. This is perhaps the one area in which the game hasn't stood the test of time, but if a better looking version is what you're after then 2004's *The Twin Snakes* for the GameCube has you covered, although this version of the game made quite a few changes and had Snake leaping around like a ninja.

If you can ignore the muddy aesthetic, though, there's a sense of realism in the gameplay

» *Metal Gear Solid* was one of the many killer apps available for Sony's PlayStation.

SECRETS AND LIES

Five of the numerous hidden moments in Metal Gear Solid

DEAD OR ALIVE

■ *After your first scrap with Sniper Wolf, you're interrogated and tortured by Revolver Ocelot. If you submit to torture, Meryl will be killed and you escape with Otacon at the end instead.*

GOOD VIBRATIONS

■ *In this scene that occurs in the midst of Snake's torture, Naomi Hunter offers to comfort him by stimulating the nanomachines inside his body, making your controller vibrate in the process.*

IRRITABLE BOWELS

■ *The soldier that Meryl knocks out and subsequently ends up guarding an imprisoned Solid Snake is Johnny Sasaki, a recurring character that eventually marries Meryl in MGS4.*

EGO ATTACK

■ *Psycho Mantis does a great many things when you encounter him, but there's a moment where the screen clips and then fades to black, with the word HIDEO appearing across it. This joke is repeated in MGS2.*

MIND READER

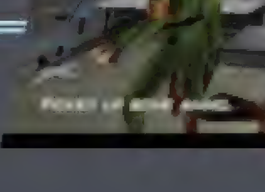
■ *Before the boss fight, Psycho Mantis famously reads your memory card to see how much you've saved and how many times you've died, as well as other games that you've played before. Creepy.*

ALL IN THE GENES

The DNA of Metal Gear Solid

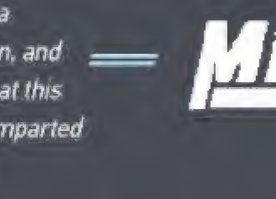
1981 — 005

■ Sega's *005* is often credited as being the first ever stealth game, and even features the ability to hide in boxes.



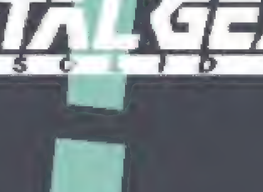
1981 — CASTLE WOLFENSTEIN

■ Another early stealth title that laid foundations for what Hideo Kojima would popularise for modern times with *Metal Gear Solid*. You can sneak past guards and even impersonate them.



1987 — METAL GEAR

■ Hideo Kojima's MSX original was essentially the backbone of what he'd create for the PlayStation.

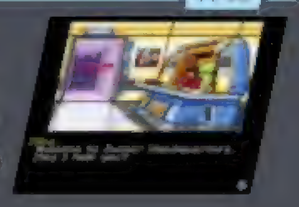


1988 — HOSTAGES

■ Developed by New Frontier, *Hostages* had you infiltrating an embassy and rescuing, you guessed it, hostages.

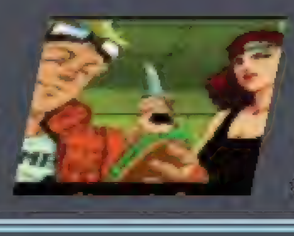
1988 — SNATCHER

■ One of Kojima's earlier titles, *Snatcher* brought adventure and sci-fi together – two things that he later explored heavily in *MGS*.



1994 — POLICENAUTS

■ Kojima began to hone his storytelling craft with his science-fiction opus. A poster for the game can be seen in Otacon's office.

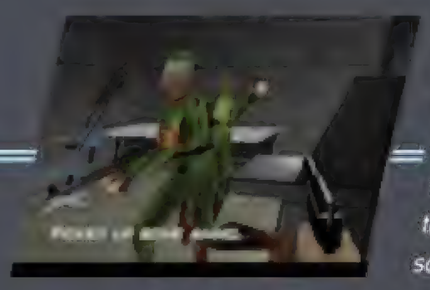


1994 — FINAL FANTASY VI

■ Given *Metal Gear Solid*'s narrative focus, it's easy to see how Square's franchise could have had an influence.

1997 — GOLDENEYE 007

■ Kojima has said before that he's a massive *Bond* fan, and we like to think that this timeless shooter imparted some inspiration.



METAL GEAR SOLID

that still holds true today. Kojima and his military advisor, Motosada Mori, worked hard to ensure that the military aspects of the game were authentic, with the use of suppressed weapons, chaff grenades and mine detectors contributing to a more serious military simulation than many of *Metal Gear Solid*'s contemporaries. Obviously, there was a lot there that was exaggerated – nanomachines *aren't* a thing, funnily enough – but the attention to detail remains to be startling. Each weapon feels intuitive, and even though you're playing from what is effectively a top-down perspective there's a tangible sense of control to what you're doing.

And this sense of realism extended to the game's ace in the hole – its stealth. We can remember playing the demo version of *Metal Gear Solid* prior to the game's release and being blown away by the ability to huddle against walls to avoid line-of-sight detection, the way that you could knock on a wall to distract an unsuspecting sentry and the fact that your footsteps left tracks in the Alaskan snow that could be tracked by the enemy. We'd just never seen anything like it before, and although such mechanics are child's play nowadays, they really stood out back in 1998.

Of course, if you wanted to experience complete and utter realism you wouldn't be playing a videogame, and Hideo Kojima, as you'll know if you've played *Metal Gear Solid* or any of its sequels, understands this better than most directors out there. There are numerous occasions on which there's a nod toward breaking the fourth wall with a little knowing humour, like Meryl shrugging towards the camera when you tread on a mine before Sniper Wolf and the references to pop culture when you're desperately trying to save the bloody game and Mei Ling just *won't shut up*. It's an intricate balance ▶

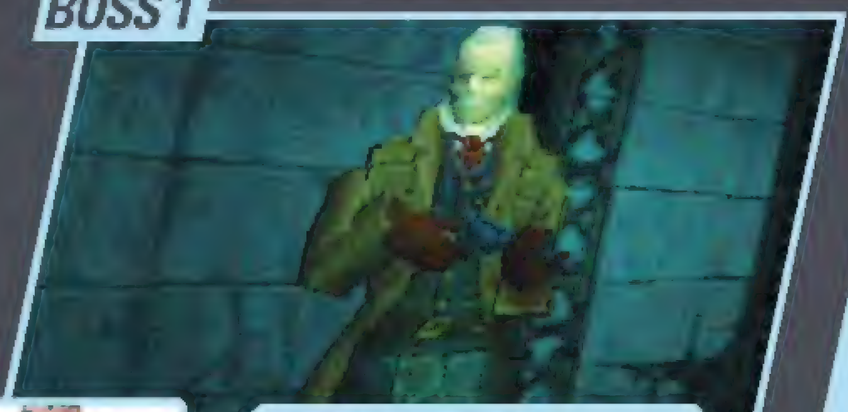
» [PlayStation] In this early confrontation, Kojima forces you to resort to shooting rather than sneaking.

» [PlayStation] Environments are pretty varied, considering the fact that the whole story takes place in one location.

BOSS RUSH

Pitted against Solid Snake were the ruthless and deadly members of FOXHOUND, a tank, a helicopter and a massive robot. Easy

BOSS 1



REVOLVER OCELOT

■ *A gun-toting, duster coat-wearing nonsensical old Russian chap, Revolver Ocelot eventually proves to be pretty much the most important character in the franchise later on, yet his appearance here is pretty demure.*

HOW TO BEAT THEM: *As you're in a small room filled with C4, the first thing to bear in mind is not to shoot across the room at Ocelot, but instead pursue him round the edges and pick your shots carefully. Change direction regularly and wait for openings when he's reloading.*

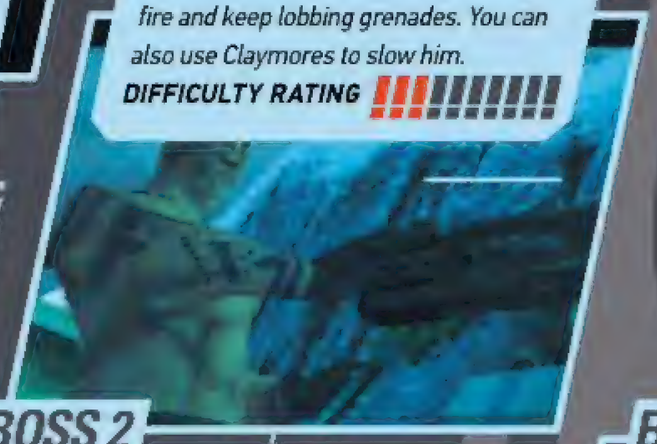
DIFFICULTY RATING !!!!!!!!!!

VULCAN RAVEN (TANK)

■ *When you leave the hangar after defeating Ocelot, a very large man in a very large tank is waiting for you. This is your first showdown with the shaman, Vulcan Raven.*

HOW TO BEAT HIM: *Grenades are essential for this fight, and you should have some from the second floor basement in the first area. Crawl until you can get near the tank without it firing its main gun, and then run around it to avoid machine gun fire and keep lobbing grenades. You can also use Claymores to slow him.*

DIFFICULTY RATING !!!!!!!!!!



BOSS 7

BOSS 2

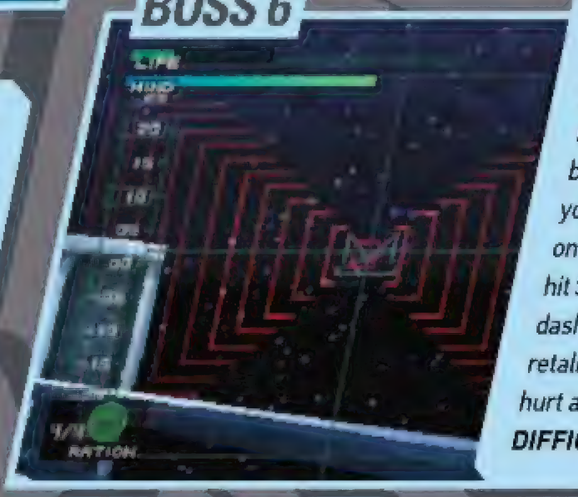
GRAY FOX

■ *You hear rumours of the ninja's exploits as soon as you arrive in Shadow Moses and he's not to be underestimated (especially on harder difficulties). Gray Fox is central to the plot.*

HOW TO BEAT THEM: *In the first few minutes of the fight, engage him in fisticuffs – if you shoot at him he'll deflect your rounds. Once he starts vanishing, use Chaff Grenades to mess with his suit and go to town with the FAMAS. Be sure to avoid his plunging attack – it hurts.*

DIFFICULTY RATING !!!!!!!!!!

BOSS 6



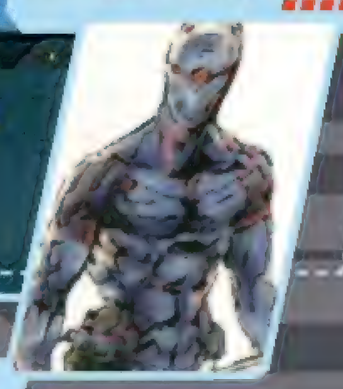
LIQUID SNAKE IN HIND-D

■ *At the top of the longest staircase in videogame history, Liquid Snake attacks you in the Russian gunship you saw earlier.*

HOW TO BEAT THEM: *Use the big block in the middle as cover and trust your radar. As soon as you've locked on to the helicopter with your Stinger, hit Square, then R1 to un-equip and dash behind cover, as Liquid is sure to retaliate immediately. The heatseekers hurt a lot, so be sure to grab cover.*

DIFFICULTY RATING !!!!!!!!!!

BOSS 3



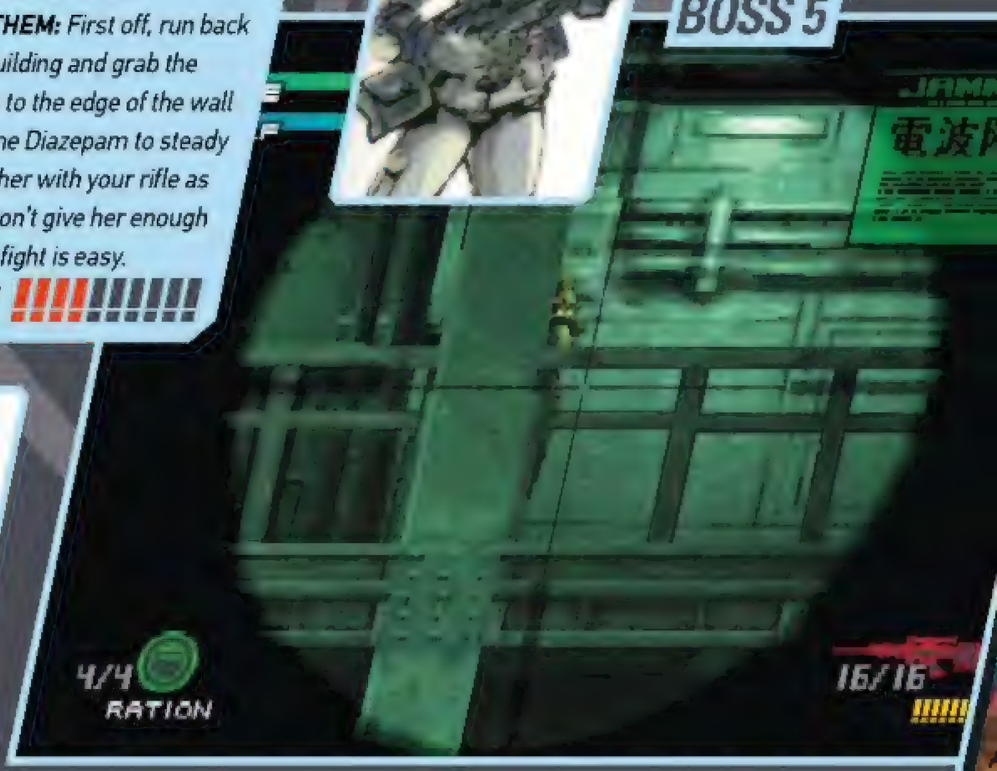
SNIPER WOLF (PART 1)

■ *After defeating Mantis and making your way past some wolves, you reach a long passageway. At the end of this passage lies Sniper Wolf, who very quickly makes herself known.*

HOW TO BEAT THEM: *First off, run back to B2 in the first building and grab the PSG-1. Lie as close to the edge of the wall as you can, pop some Diazepam to steady your aim and follow her with your rifle as closely as possible. Don't give her enough time to shoot and this fight is easy.*

DIFFICULTY RATING !!!!!!!!!!

BOSS 5



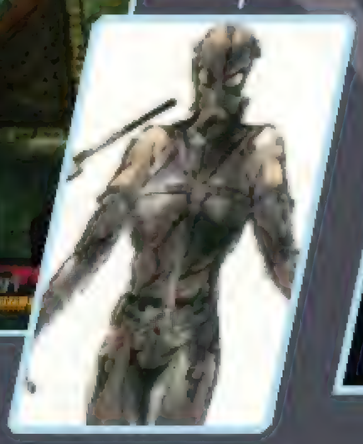
PSYCHO MANTIS

■ *If you've never heard of this boss fight then where have you been hiding since 1998? Mantis is a psychic, and takes control of Meryl to make her try to kill you.*

HOW TO BEAT THEM: *Immediately switch your controller to Port 2 and the rest of the fight should be a doddle. He'll throw all manner of things at you from around the room, but learn the patterns, keep moving and he'll soon topple. It should be a given that you're best off punching Meryl rather than shooting at her – you don't want to kill her.*

DIFFICULTY RATING !!!!!!!!!!

BOSS 4

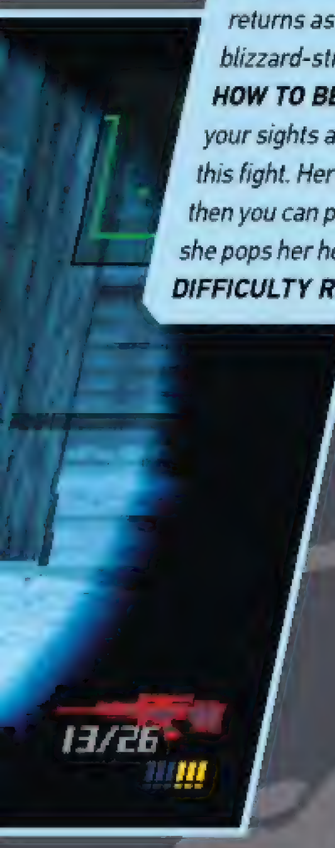


SNIPER WOLF (PART 2)

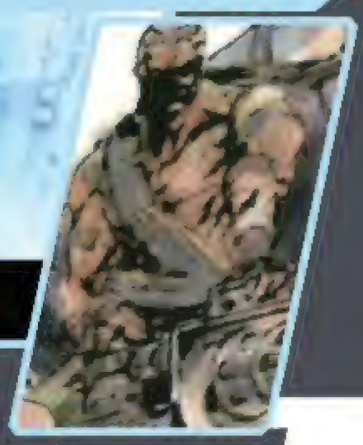
■ *Soon after you've downed the chopper, Sniper Wolf returns as promised, firing at you from across a barren, blizzard-stricken plain.*

HOW TO BEAT THEM: *As long as you can keep her in your sights at all times there's no real excuse for losing this fight. Her shots hurt a lot, but if you're being alert then you can pretty much lie still and fire as soon as she pops her head out.*

DIFFICULTY RATING !!!!!!!!!!



BOSS 8



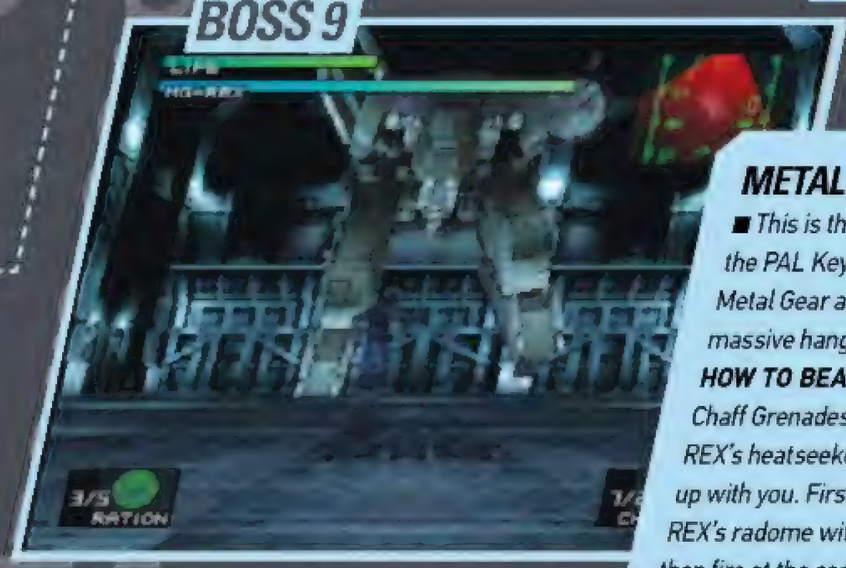
VULCAN RAVEN

■ *Upon reaching cold storage, Vulcan Raven returns to do battle in the company of an enormous minigun that he's taken off a fighter jet.*

HOW TO BEAT THEM: *This fight can be tricky as Raven can see further than any other enemy in the game and simply cannot be engaged head on or you'll die very quickly. Watch the radar and get behind him with the Stinger or the Nikita, and keep moving at all times or you're screwed.*

DIFFICULTY RATING !!!!!!!!!!

BOSS 9



METAL GEAR REX

■ *This is the big one. After entering the PAL Key, Liquid Snake activates Metal Gear and attacks you with it in a massive hangar.*

HOW TO BEAT THEM: *Keep throwing Chaff Grenades at all times – this way REX's heatseekers will struggle to keep up with you. First you need to disable REX's radome with the Stinger, and then fire at the cockpit in the second half of the fight. Keep moving and keep your Rations equipped!*

DIFFICULTY RATING !!!!!!!!!!

BOSS 10

LIQUID SNAKE

■ *We'd argue that this is one of the greatest showdowns of all time – a bare-knuckle fist fight between two brothers on top of a massive robot. Incredible.*

HOW TO BEAT THEM: *Liquid is kind enough to tell you to stay away from the edges, so heed his advice. Other than that, it's best to just keep moving around and throw in as many punch-punch-kick combos as possible – you don't have much time to beat him, so make each combo count.* ***DIFFICULTY RATING*** !!!!!!!!!!

» [PlayStation] This famous scene was reworked for *MGS2*. Despite its humour, *Metal Gear* isn't for kids.

▶ between action, stealth and the occasional smirk that works so well, when on paper it sounds like it shouldn't.

Perhaps the most cited moments in the game are when the fourth wall does, in fact, come crashing down, It almost feels like a waste of time mentioning the Psycho Mantis encounter in the game's first act, as you'd have to have been living under the sea since 1998 to not have heard about his ability to read your memory card, to make your controller vibrate and the fact that you needed to swap your pad to Port 2 to beat him. This is the sort of quirkiness that seems to be missing from modern games. It's still surprising just how effortlessly the mood switches from self-knowing to hard-nosed, for instance when Revolver Ocelot tells you to mash Circle and not to use a Turbo controller or he'll know, before ruthlessly electrocuting you.

But the most important to *MGS* is that no other game could hold a torch to it back in 1998, and the main reason that Kojima succeeded in his goal to create a videogame that was as close to being a movie as possible, was *Metal Gear Solid*'s proclivity for drama. Every stab of the orchestra, every conversation beat and every set-piece was superbly executed and still draw you in now. It's a bit cheesy, sure, but after a few hours in front of *Metal Gear Solid* it's hard not to find yourself completely engrossed. ✱

» [GameCube] This enjoyable remake adds *Metal Gear Solid 2* play mechanics.

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Minority Report

CLASSIC GAMES YOU'VE NEVER PLAYED

DREAMCAST

Think of the Dreamcast's library and the usual suspects will no doubt spring to mind: Shenmue, Soul Calibur, Sega Rally 2 et al. Here Tom Charnock examines some Dreamcast exclusives you may have missed...

» [Dreamcast] Comparisons to *Tron* are easy to draw. There are no light cycles here though – just the enigmatic and oft-mentioned 'cosmic bus.'

» [Dreamcast] The retro-futuristic style is very reminiscent of *Rez*, and the engine uses subtle lighting to great effect.

"The real appeal of Cosmic Smash is the pure simplicity of the action"

COSMIC SMASH

■ DEVELOPER: SEGA ■ YEAR: 2001

■ Sega's arcade heritage is plain to see when you look at the Dreamcast's most high profile titles – the console was, in essence, a cut down and domesticated version of the popular NAOMI hardware, after all. *Crazy Taxi*, *Virtua Tennis* and *Virtua Fighter 3* are all hallmarks of the system which started life on the Dreamcast's bigger, meaner brother... but there are other arcade titles which graced the living room that you may not have experienced. Perhaps the least well known of these arcade conversions is *Cosmic Smash*, a stylised blend of squash and *Arkanoid* in which you assume the role of a semi-translucent humanoid whose sole objective is to hit a glowing red ball against a collection of brightly coloured, moving blocks. Hit these blocks and they vanish back into the ether from whence they came, and once you hit them all you move on to the next level. With every advancement in stage, new mechanics are thrown into the mix – barriers appear, blocking your ball's trajectory; and the blocks themselves begin to move in ever more erratic patterns, increasing in speed as you progress.

The real appeal of *Cosmic Smash* is the pure simplicity of the action – controls are relatively basic and the type of racquet swing is dictated by the height and proximity of the ball to your faceless avatar. Directing your ball couldn't be easier, though, as deft manipulation of the analogue stick will invariably send it in the direction you point. You have an unlimited number of balls to serve, so missing a return isn't your main problem in *Cosmic Smash*; rather it is the ever-ticking clock that is burned into the court's pristine floor that serves as a reminder that fluffing your lines will mean a delay in getting the game going again, which means even more frantic gameplay as you try to hit the last block as the seconds slip agonisingly by. You do also have a super (trick) shot that, upon being unleashed, will demolish any blocks in its path, and also makes for some spectacular replays as your player glows orange and leaps into the air to perform impressive acrobatic displays of agility.

Once you learn that combining jumps and being a show off is something that is actively encouraged, *Cosmic Smash* becomes less about trying to hit the

ball and more about trying to hit it in the most outrageous way possible – leaping from wall to floor and back again, smashing blocks with aplomb. A word of warning though – this game gets very tricky, very quickly and the time limit is strict to say the least. Once you do get the hang of things and start progressing though, you'll be pleasantly surprised by the variation in the courts, while the bafflingly relaxed voice over guy invites you to ride the 'cosmic bus,' whatever that is. *Cosmic Smash* was released in Japan only, was the only official Dreamcast game to come in a DVD-style case and – rather ironically – was a budget title. Ironic because in today's climate you'd be lucky to get much change from £100 for a copy of this curious arcade oddity.

IN DEPTH

GAME

■ Holding down the trick shot button will charge your player, enabling you to let loose with a shot that will destroy several blocks at once, sometimes this will even activate a pretty cool replay of the feat.

DEUCE

■ *Cosmic Smash* is a single-player experience with only one mode of play. The original arcade game gave those who were good enough a code to enter into the online leaderboards.

MATCH

■ The timer is your main adversary. It ticks down incessantly, and once it reaches zero it's game over. No continues, no sympathy. Using the trick shot accelerates time, too.

SET

■ The blocks are your quarry. They slide up, down, left and right in an attempt to annoyingly avoid your aim. The further along the cosmic bus route you get, the trickier they are to hit.

IF YOU LIKE THIS TRY...

ARKANOID

VARIOUS

■ Taking the *Breakout* model and adding new features such as power-ups and barriers, *Arkanoid* is undoubtedly an influence on *Cosmic Smash*. Endlessly replayable, the timeless formula of breaking bricks with a paddle has stood the test of time as is evident with the number of pretenders to its throne.

REZ

DREAMCAST/PS2/XBOX 360

■ While *Rez* and *Cosmic Smash* may be from opposite ends of the spectrum as far as gameplay experiences go, the similarities in visual style are pretty obvious. Both titles employ minimalist vectors and neon lines juxtaposed with solid black and white backgrounds. The effect is visually stunning.

VIRTUA TENNIS

ARCADE/DREAMCAST

■ Comparisons are bound to be drawn, and they'd be right. *Cosmic Smash* owes a lot to Sega's other racquet-'em-up, including the great 'easy to pick up, difficult to master' gameplay. The main difference is that *Virtua Tennis* is a benchmark in multiplayer mastery, while *Smash* is a solitary experience.

Minority Report

OUTTRIGGER

■ DEVELOPER: SEGA ■ YEAR: 2001

■ **The most glaring issue with the European release of *Outtrigger*, was that – much like other PAL Dreamcast releases of the era (such as *Daytona USA 2001*) – the online multiplayer functionality was stripped out.** When taking into consideration that *Outtrigger* is an arena-based shooter with an emphasis on fast, super-twitchy deathmatches, you'd be forgiven for thinking that this would have sounded the death knell. But you'd be mistaken. *Outrigger* is actually one of the best shooters on the system either as a singular or local multiplayer experience. The lone *Outtrigger* player can engage in a fairly lengthy arcade or training campaign in which a series of missions must be completed in order, and throw ever more challenging completion criteria at you.

These range from only using a certain weapon to kill so many enemies in set time limit, or avoiding being hit by incoming fire. The area where this AM2-developed arcade conversion really shines though, is in its multiplayer death match mode, and even without the online aspect it really stands out as the pinnacle on the Dreamcast. Bright, brash visuals, a slick frame-rate and cramped arenas literally packed with power-ups, ammo and health packs mean this is the ultimate shooter with four pads plugged into your console. *Outrigger* can be played from either a first or third-person view and so it straddles the line between *Quake 3* and traditional arena shooters like *Heavy Metal Geomatrix*; and while the default controls are cumbersome in the extreme (either change them to the 'D1' setting or get a mouse and keyboard hooked up!), *Outrigger* is an absolute must-play for fans of the genre.

» [Dreamcast] You can only carry three weapons – a machine gun, a rocket launcher and grenades. These must be chosen before the round starts.

» [Dreamcast] Power-ups, such as this one, offer enhancements to your weapon power, health meter and also give bonuses such as thermal imaging.

» [Dreamcast] Arenas are varied – this is the library. Burning books is not encouraged, but if a rocket hits a shelf, no-one's going to persecute you.

MORE GAMES TO PLAY

» MAX STEEL: COVERT MISSIONS

■ DEVELOPER: TREYARCH
■ YEAR: 2001

■ **Based on the** toy line which was based on the animated TV series, *Covert Operations* is a 3D beat/shoot-'em-up with impressive visuals and varied weaponry. The stages can be a little samey with you fighting through scrapyards and military bases, but there's a great adventure lurking in this late US exclusive. The well-animated cutscenes add an certain charm to the game, too.

» CANNON SPIKE

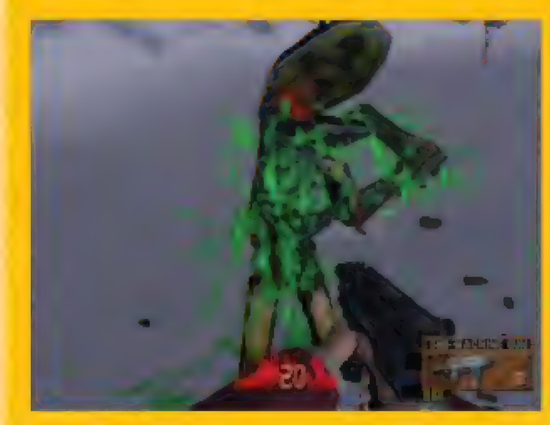
■ DEVELOPER: PSIKYO
■ YEAR: 2000

■ **Playing like a** mix between *Zombie Revenge* and *Powerstone*, this is a 3D top-down fighter where players take control of characters from Capcom titles (including *Mega Man* and *Street Fighter*) in a series of short action stages and boss fights. Each has both projectile and close quarters moves, as well as specials. The game is a little short, but there's good variety in the action-packed levels and imaginatively designed bosses.

» HEAVY METAL GEOMATRIX

■ DEVELOPER: CAPCOM
■ YEAR: 2001

■ **Another fantastic arena** fighter from Capcom, this NAOMI port borrows themes and characters from the *Heavy Metal* series of comic books. The matches play a lot like those in *Virtual On*, with fast-paced rounds of weapon-based combat taking place in large, open environments full of obstacles and pick ups. Lots of fun multiplayer modes and a great soundtrack.



» D2

■ DEVELOPER: WARP
■ YEAR: 1999

■ **After enduring the** psychological terror of the first *D* game, you'd think the late Kenji Eno's Warp would have given protagonist Laura a break. But no – in *D2* you again assume the role of the intrepid heroine but this time you're battling mutants in the frozen wastes of Canada. Survival horror has been done better on the Dreamcast, but *D2*'s mix of gameplay styles and outstanding visuals make it an adventure worth tracking down.

SPORTS JAM

■ DEVELOPER: WOW ENTERTAINMENT ■ YEAR: 2001

■ On the face of it, *Sports Jam* looks like nothing more than a simple party game, but delving a little deeper into this NAOMI conversion reveals a title that is way more than the sum of its parts. Wow Entertainment was formerly known as AM1 and is responsible for some fairly high profile titles on Sega's final console – *Sega Bass Fishing*, *Sega GT* and *Alien Front Online* are just some of the marques in the back catalogue. *Sports Jam* is an entirely different prospect to any of the aforementioned though: a collection of 12 sport-inspired mini-games where both button mashing and, conversely, precision timing are required to secure a place on the podium. Cycling, soccer, ice hockey, tennis, baseball, golf and NFL all get a look in as you are presented with a series of challenges that are bound by a time limit and task you with hitting a certain number of home runs

» [Dreamcast] There are two soccer stages – one involves free kicks, the other a take on 'headers and volleys' where you try to convert corners.

» [Dreamcast] This is probably the best golf simulator on the Dreamcast and it's only a small section of *Sports Jam*

or getting your golf ball as close to the hole as possible. There's a charm in what at first seems so simple, but develops into an challenge as you progress. The star of the show however, has got to be the incredibly strange 'host' who guides you through the arcade mode – there's something '*Twin Peaks*' about him, and his presence lends the whole experience a commendably surreal air.

RETRO JUNKER

»EXHIBITION OF SPEED

■ DEVELOPER: PLAYER 1 ■ YEAR: 2001

■ So this is anything but good. Boasting a frame-rate that dips into single figures almost at will, boring tracks and nonexistent car handling, *Exhibition Of Speed* is a racer that you'll want to avoid.

» ILLBLEED

■ DEVELOPER: CRAZY GAMES
■ YEAR: 2001

■ **If ever the** label 'so bad it's good' was apt, it's here. *Illbleed* is a bizarre mashup of survival horror and camp B-movie scares that stands out in a crowded genre on the DC. Set in a fairground, you must solve puzzles, kill monsters and avoid traps to survive for one night. Controls are annoying, but *Illbleed* is a curiosity with some very odd levels and plot twists. It could almost be considered a forerunner to *Eternal Darkness*.

» ZUSAR VASAR

■ DEVELOPER: REAL VISION
■ YEAR: 2000

■ **What if you** took *Star Wars: Racer* and replaced the pod engines with robotic animals? *Zusar Vasar* would be a good approximation! A racer in which you pilot a chariot pulled by a plethora of robotic fish, birds and quadrupeds around land, air and water-based courses, this Japan-only release actually plays really well and is a lot of fun. There's lots of variation in the chariot/animal combinations which adds to the longevity.

» NHL 2K2

■ DEVELOPER: TREYARCH
■ YEAR: 2001

■ **When EA decided** not to support the Dreamcast, Sega was forced to create its own sports games. The *2K* series was born and *NHL 2K2* was the last game to come from this. Indeed, it was the last official DC release in the US. Featuring true TV-style presentation, authentic arenas and fast gameplay, this was the best hockey game available on release. Goalies are stingy, but there's no better sports sim on the system.

» PROJECT JUSTICE

■ DEVELOPER: CAPCOM
■ YEAR: 2000

■ **Here we have** a 3D fighter that allows players to fight with teams of up to three, with an emphasis on performing outlandish team-based specials. It's not the most technical of Capcom's fighting stable, instead opting for a 'pick up and play' style over complex button combinations. An interesting single-player story, lots of play modes and chunky, cartoonish visuals make *Project Justice* a perfect alternative to anything productive.

KEVIN TOMS

FROM BOARD GAMES TO PITCHSIDE

Moving back in the football management market and stopping by Bournemouth for the first time since 1999, we couldn't resist inviting Kevin Toms to the Retro Gamer office – just minutes from his old Addictive Games office – for a talk about his pioneering career...

The best thing to begin with is how one of the first things you were interested in was board games. Was that just things like *Monopoly*, or was that just stuff you wanted to make up yourself?
I did make board games myself, I got interested in doing that and it's where I really started to learn how to design games. But originally yes, I used to play *Monopoly*, of course, but I used to play other board games at the time. I remember – relating to *Football Manager* – there was a game called *Soccerama*, which was a similar kind of idea and I really liked that, but didn't like everything about it. But yes, I used to play a range of board games – they're a good social thing.

Are they games that you used to play with your family, or just friends?
Friends and family, yeah. It was a popular thing to do at the time, and eventually I started writing board games myself. I used to invent ball games as well – you know, playing with a football or a tennis racquet outside, creating new games based on those things. *Football Manager* game was a board game for a long time, long before I created it as a computer game. I used to typically cut open cereal boxes to use as boards, because they were grey on the inside. I'd draw the board on there, and you could buy blank cards and dice in WH Smiths, so I used to assemble the pieces together and build board games. I did the football one over and over and never quite got it the way I wanted it. What I actually went onto later was become a professional computer programmer before I started writing games, and I could see that computers would do a lot of the stuff that you couldn't do on a board game and I started to think about doing that.

When we've spoken to a number of developers in the past, a lot of them were doing other jobs and they kind of discovered computers and went, 'Oh, this is cool, this is something that I can tinker around with.' But you'd already done that, so how did you get into that from school?
When I was at school, I originally got my parents to ask the careers master if I could become a games designer. He heard that and said, "It's just a phase, he'll grow out of that – it's not a real job." So that was disappointing, but in fact what I then aspired to do was computer programming. I didn't really know what I was getting into when I got into it, but it just had a feeling ▶

WHO IS KEVIN TOMS?

Born in Paignton, Devon, Kevin Toms found success in his twenties by combining his passion for creating games with his skills as a professional programmer. His debut game *Football Manager* was a long-lived hit that spawned an entire genre and Addictive Games, the publishing company he founded to promote it, was a successful publisher. However, by the time the Nineties rolled around he had sold Addictive Games and left the games business. Now Kevin is revisiting the genre he created with a new mobile game called *Kevin Toms Football*, available now for iOS.

"I originally got my parents to ask the careers master if I could become a games designer. He heard that and said, 'It's just a phase, he'll grow out of that – it's not a real job'" Kevin Toms

SELECTED TIMELINE

1982

FOOTBALL MANAGER

■ Kevin likely didn't know that he was writing one of the most enduring games of the Eighties when computers finally allowed him to realise his long-held ambition to create a game about football management. Nevertheless, it became the bedrock upon which Addictive Games was founded, and sold steadily for years.

1985

SOFTWARE STAR

■ Managing a company that sold games taking up the time he used to spend making games, Kevin took the unusual step of turning that experience into a game. It's hard to survive the early months, but seeing your new release rocket to the top of the December charts is magical.

1987

PRESIDENT

■ It's hard enough being a head of state, but try clinging to office when you're besieged by tanks and trying to feed a hungry population! This political fight for survival is a fun game, but sales suffered as Kevin looked to get back into the programming game full-time.

1988

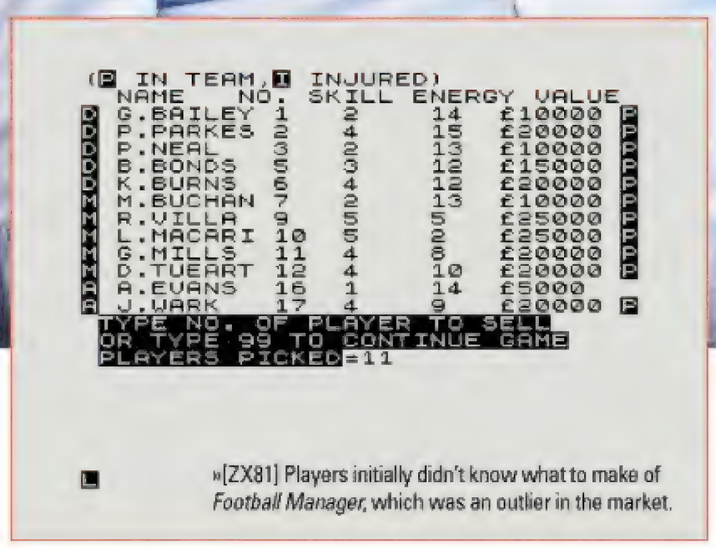
FOOTBALL MANAGER 2

■ Kevin's first game following the sale of Addictive Games was the long-awaited follow-up to his original hit. The new ability to make substitutions and choose your formation advanced *Football Manager 2* over its predecessor, highlights looked better and covered the whole length of the pitch, and business decisions were expanded.

2015

KEVIN TOMS FOOTBALL

■ While mobile platforms aren't an obvious choice for football management games, which are notorious consumers of free time, Kevin has taken a retro approach which keeps the game moving along at a travel-friendly pace. For the first time, the internet is allowing him to provide long-term updates to the game.



»[ZX81] Players initially didn't know what to make of *Football Manager*, which was an outlier in the market.

▶ that it was something I wanted to do as a job, so I went straight from school into a trainee computer programmer job and learnt to program mainframes. Around that time the first microcomputers started to appear and the first one I got my hands on was a TRS-80 equivalent which was a Video Genie. But also the ZX80 and ZX81 were starting to appear as well, and for me, I saw them and thought, "Ah! The football game I've always wanted to do, I can do on this."

Another thing that's quite interesting about you is that – again, going back to the other developers – when we speak to a lot of them, they cut their teeth on arcade games. Was there any reason why you didn't want to make an arcade game, and why you were so focused on *Football Manager*?

When I used to go to the micro fairs at the time, it was very different to everything else. Most games were essentially arcade clones, but I was coming from a different direction because I already had been writing this football game for a long time – probably over ten years or more – trying to get it to work as a board game, and I'd found some way that I could solve all the problems and it was a case of creating it on a computer and then putting it out there.

But when I used to be at the micro fairs and people used to ask, 'What's this?' I would have to explain to them what it was, they didn't know what it was. Then they'd sit and play it, and then they'd really enjoy playing, so other people would watch what they were doing and start talking to them. They acted like kind of salespeople for me, explaining the game to other people and explaining why they were enjoying it. The fun part's the key part, and although at first they didn't know what they were doing, they could pick it up quickly and get fun out of it.

Were you still working on *Football Manager* before Addictive Games started?

Well, I started Addictive Games for *Football Manager*, so it started at the same time.

Why did you decide to set up Addictive Games in Bournemouth? What was the appeal?

I started off in Milton Keynes, which is where I happened to be living at the time. When I was duplicating the cassettes as a bedroom coder, I was making cassettes in the bedroom of a one bedroom flat. That was the way I manufactured at that time, but it was very cramped and the business started to develop and I realised I would need an office or somewhere better to work from, because to ship the cassettes I was still taking bags down to the post office.

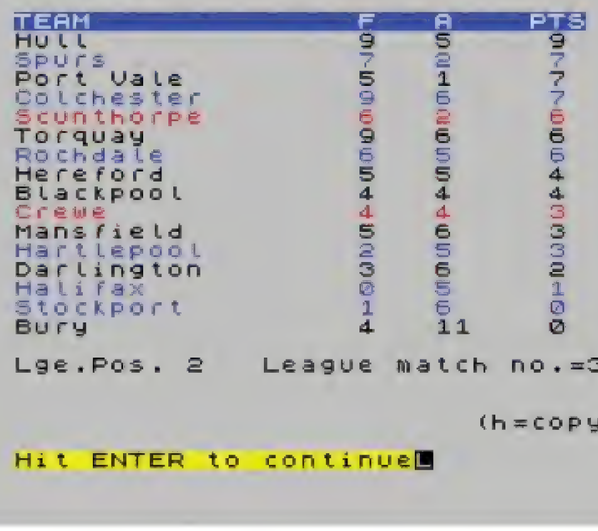
A lot of things were being built in Milton Keynes at the time, and they were building a new office block just down the road. I went to see it and actually put my name on an office that was due to be finished in a few months' time. And it was doing that which triggered the thought 'Well, I never really intended to stay in Milton Keynes.' I mean, I'd always lived by the coast, and this was really inland and I missed being by the sea. So I thought if I'm going to change, this is the time to change, before this grows too much and I become locked into being here. So that was the decision point. I looked around where I would go, and I decided I didn't want to be too far from London, and chose Bournemouth because it had a sandy beach and it looked like a nice place!

One of the things which everybody remembers about your games is that there's obviously a rather handsome chap that is featured on the front cover who just happens to be yourself. Where did that idea come from?
It wasn't there at the start, actually – it really came about from those micro fairs I was talking about. I used to attend the micro fairs and be there to sell my game, and because of the lack of retail outlets it was quite a good way to let people know. They were there quite early, there were small games shows, so I would be showing people the game, explaining it to them and everything, and then they would come over and talk to me and say "Did you write it?"

I thought, 'Well, this is a bit like books and music,' and I thought maybe it's better to be a person and not a corporation in this business, because you don't care what publisher U2 is on, you care about the band because you like its music – with any band that's always true, and I thought for books it's the same, you tend to buy by author. I intended to write more games, so I thought it would be good to say, 'I wrote this' – so I'd make it very personal. It got a good response, and it seemed to have been a good idea. I always thought that more people would have done that – if not later, when bigger publishers got hold of all the developers and didn't really want them to have a name for themselves. I still believe it's right even for bigger things done by a team, because a team's just like a band. I think it'd be more interesting. But there is another side to it of course, which is also that you're vouching for the credibility of your own product, because if it's crap...

Well, your face is on it – so the next time you'd go to a games fair, you'd be looking over your shoulder just to make sure you hadn't upset anyone! So when it moved over to the ZX Spectrum, was it still mail order then?
No, that's when it started to change. At the beginning of 1982, it was just mail order, that's the only way you could sell them – there were no retail outlets at all. About mid-way through the year at computer fairs, there were people coming up who had formed their own retail outlet for games, and they were innovating – nobody else had done that. So I changed the packaging to make it suitable for them. And then about September, I think it was, I got contacted by WH Smith and it wanted to stock it, so the chain stores for the first time started stocking the games. Then it obviously grew a lot faster at that point, and I had to make the full colour cover and things like that.

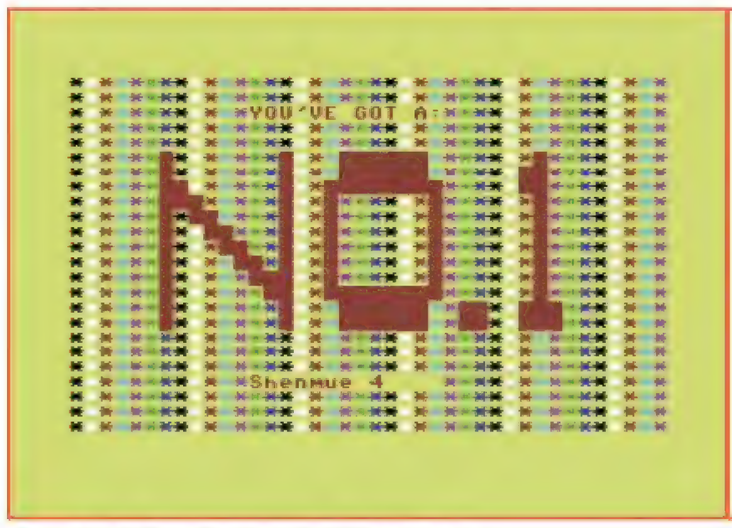
» [ZX Spectrum] We never did manage to get Spurs to win the double, despite our efforts.



And is it round about then that you decided it was time to ramp things up? The game was clearly taking off, and your full-time job, maybe it was time to evolve into something else?
Yes it was. I was still working full time and I was running a part-time business, and I went to see WH Smith in London and it said it wanted to order the product. Its first order was more than I earned in a year, so I said, "Right, I can go full-time on this now." And then it followed up with another order about a month later.

When you first started Addictive Games up, was it just you on your own? How quickly did it expand?
It was just me for quite a long time, my first employee was quite late in the first year, and I just got an admin assistant to help me to run some of it, and then I added extra people as I needed more people at the company, so certainly for most of the first year it was just myself running it.

This was obviously relatively early in the software industry's life, so were there many other developers around at the time? Did you find yourself competing with them?
No. No offence to them of course, because I had a different genre of game, so I wasn't really trying to compare with other games that were arcade-based. I think it was a very innocent time in fact – it wasn't like that, I mean we used to go to the shows and we'd meet each other for the first time and have a drink. It was quite a fun time, because none of us knew what we were doing and we were just working it out as we went, some things you got right, but you got plenty of things wrong as well. ▶



» [C64] Consider this a preview for the charts of 2029. It's a PlayStation 5 exclusive.

» [C64] Of course, if you do meet your targets in *Software Star*, the bar is raised. It's a tough life, and Kevin would know.

ADDICTIVE QUALITIES

As well as developing classic games, Kevin proved his publishing pedigree through Addictive Games...

STRINGER
1985

■ Steve Wiggins' single-screen platformer casts you as a hack journalist trying to snap a picture, while being chased by hotel staff. It polarised reviewers back in 1985, receiving scores from 8/10 in *C&VG* to 1/5 in *Your 64*. You might know it as *Mr Angry*, the title Codemasters that re-released it under in 1986.

BOFFIN
1985

■ Paul O'Malley's high quality platformer was great for Acorn Electron owners but doubly good for BBC Micro owners, as the enhanced Mode 1 graphics version was a very different experience and included for free. Arachnophobic players be warned: the large tarantulas featured in the game are unnervingly well-animated!

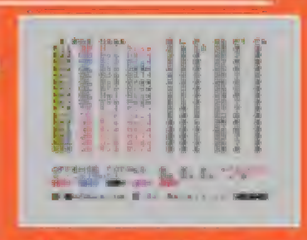
ARAC
1986

■ Having wowed BBC owners, Paul O'Malley's next trick was to astound Commodore 64 owners with this very unusual arcade adventure in which you must assemble a spider-like robot and prevent reactors from overheating. The game received excellent review scores from the likes of *C&VG*, *Commodore User* and *Zzap!*.

KIREL
1986

■ This isometric 3D puzzle game from Siegfried Kurtz can be maddening, but it's actually very good. Your goal is to collect a series of bombs and exit the stage – it sounds easy, but you're under constant time pressure thanks to a pre-lit fuse! *Crash*, *Your Sinclair* and *Sinclair User* all rated it rather highly.

HEAD COACH
1986



■ Arguably the best-known of the Addictive Games stable outside of Kevin's own work, Simon Davies' *Head Coach* applied the management simulation formula to the glitzy world of the NFL. It was a sales success, hitting third in the ZX Spectrum charts during the busy autumn shopping season.

What sort of things did you get wrong, then?
The biggest thing I got wrong would be that the biggest-selling games were my own and I wasn't able to write, because I was too busy with the business side, so at some point I needed to get someone really good in to do that. I tried, but I didn't get the right people at the time. So I had a product that was selling strongly and established, but I wrote it and I was very busy with the business that came from that.

A lot of other developers have had that problem and basically they just don't like management side of the job, because they just want to make games – that is what they do best. Was there a time where you just felt that you weren't going to be able to make games anymore, or were you always trying to keep your hand in?
I came to something of a crossroads and I met with a business advisor, and I said, "This is not right for me, the games that sell best in my company are the ones that I wrote myself but I'm not able to write at the moment, I just don't have the time anymore and I'm not sure what to do." He said to me, "Well, we can work out how to solve the problem when you work out which thing you want to do – either you've got to forget about writing games and become a businessman, or go back to writing games if that's what you want to do." And around about that time, that's what I eventually did – which is when *Football Manager 2* got written.

Looking back now, is that something you regret? Do you wish you'd stuck with it, or was it just a case where you wanted to do what you wanted to do?
I was quite young at the time, and there were a lot of things I was doing out of inexperience rather than experience, and I would have just done it differently. I remember there was at one time some people who wanted to come in and invest a lot in the company and done a lot of the business side, but they had very strong views about how they would do it and it didn't come from the games industry, and I thought it was just a bad fit and it kind of put me off that. So I tried a different way to solve it, and that was one that perhaps would have been the right way, if it had been the right people – which, of course, you don't know at the time. I sometimes, I hired the wrong people, as well – I interview people now, and I do a much better job now than I did back then.

You obviously did do quite a few sports simulation games, but you did try different takes on the same themes – one of which was *Software Star*.
People know about *Football Manager* because it's the big seller, but a lot of people like *Software Star* too – I've had quite a few people write to me about *Software Star* who really liked the game.

Was that actually planned as a satirical take on the software industry at the time, or was it just because it was something that you were passionate about and you knew about it?
I knew about it and I just thought it would be a good business game, because it was a different kind of business and I thought I could have some fun with it – the charts idea was something that I wanted to do, and then some of the marketing things. You had a choice between hype and honesty as a way of approaching it, and hype if it worked was more successful, but it was more risky than honesty. I even remember somebody writing to me and complaining that that mechanism was immoral and that I shouldn't be promoting the idea the hype could be successful because it's dishonest.

How did *Software Star* sell in comparison to *Football Manager*?
Probably 10 per cent, or something like that?

"It had a full keyboard, it was better – it was still Z80 and it was a good machine to program, nice graphics, very friendly and easy to use"

Kevin on preferring the Amstrad CPC to the ZX Spectrum and C64

KEVIN TOMS' MUST-PLAY GAME

Why you should play Football Manager

Games like *Football Manager* inspire a certain amount of obsessive devotion from everyone involved in them, from the developer to players. Kevin Toms spent years trying to put his ideal game of football management together, fans spent countless hours taking their home town heroes to the top flight and we'll admit to spending a little too much time refreshing ourselves on the finer points of the game.

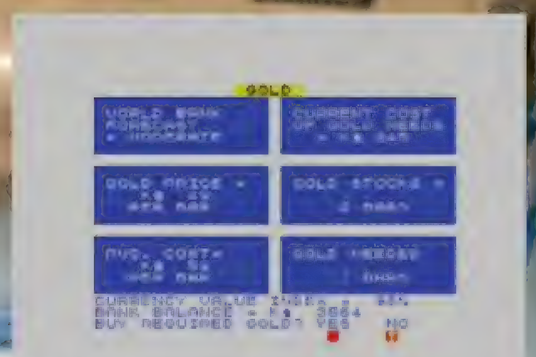
It's hard not to get invested, though. The action-oriented football games that had come before gave you control, but *Football Manager* gave you a connection. Just by having names to identify with, your players became more than the sprites and lines of text that represented them. It was a technical achievement for its time and remains a compelling game even today, not to mention a point of inspiration for many Eighties developers. Kevin Toms' games were usually good, but this one was revolutionary.

1 There was nothing quite like it at the time, and it remains a uniquely complex management simulator on the ZX81 – it was pretty much impossible to top it.

2 A little football knowledge can go a long way – keep an eye out for the likes of Glenn Hoddle and Bryan Robson at bargain basement £5,000 transfer fees.

3 Highlights convey the feeling of watching Spurs make a attempt at the goal, only to be thwarted by wayward shooting that would shame a Stormtrooper.

» Kevin explains how programming on the ZX81 wasn't so bad, despite that membrane keyboard



» [ZX Spectrum] Getting *President* made on time required Kevin to make a rather daring car journey...

» [Amstrad CPC] *Football Manager 2* had more finance options than its predecessor.

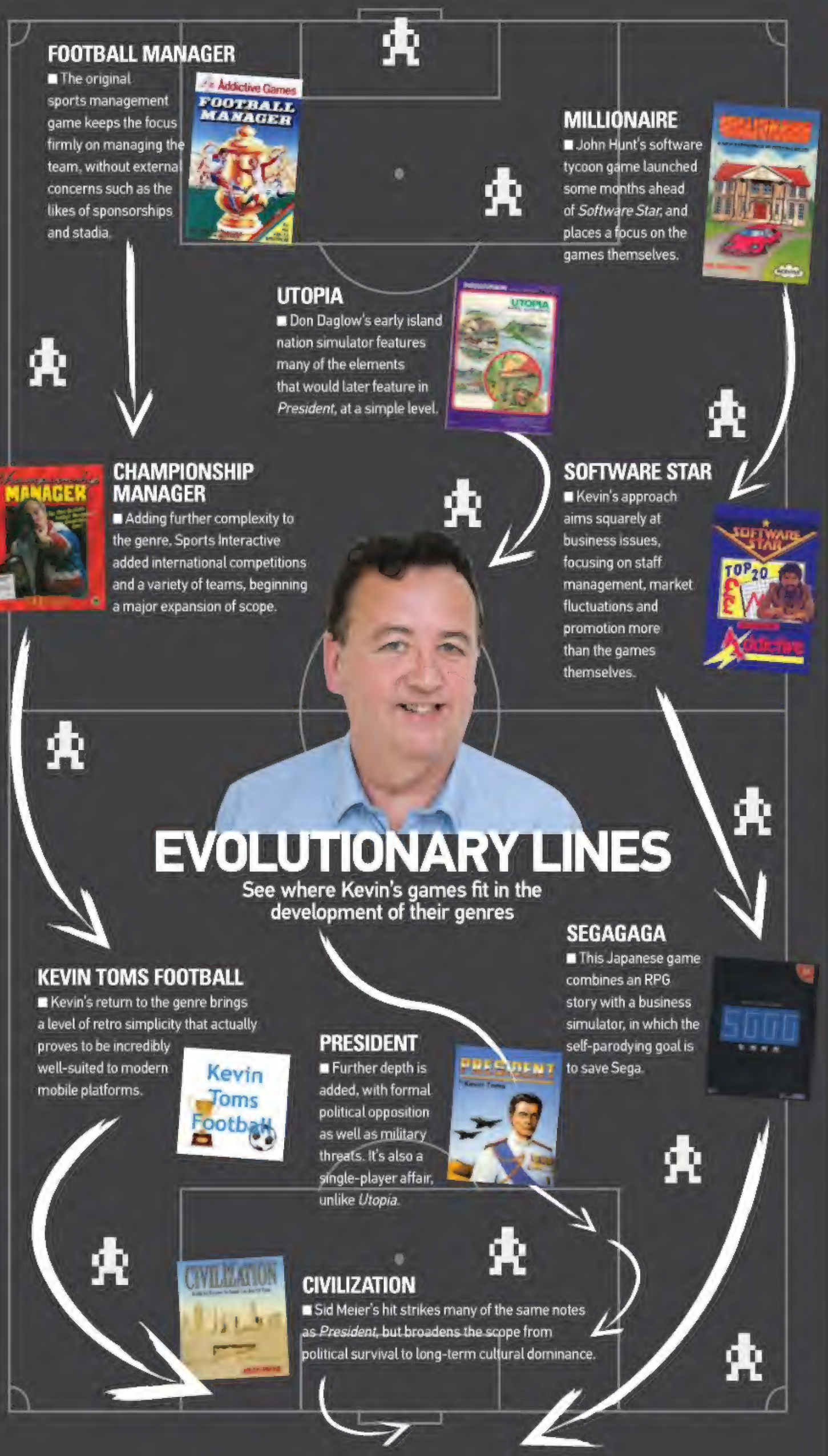
» [iOS] Fans of Kevin's earlier games might want to take a crack at *Kevin Toms Football*. It's on sale now.

"You do feel the pressure, I mean I still feel that now. You want to keep up the same standard or better" Kevin Toms

Which is why we never got a sequel...
It's true, but I should have done a sequel. If I had more time to develop games, I would have done the sequel to *Football Manager* myself before I worked with Prism, and I would have done a sequel to *Software Star* as well. I want to do a *Software Star* sequel.

Theoretically you could do it on iOS, couldn't you?
Yeah, I want to do a *Software Star* sequel because I think it would be fun to do it. I know people have copied the concept and done similar games, much more complicated ones, but I would like to do it my way and have another go at that because it was fun at the time and I think I could do an interesting job with it again.

With *Football Manager 2*, you must have had a lot of pressure there, because *Football Manager* was just huge. Did you actually feel the pressure from the outside, or was it the case that it was just internal and you knew that you didn't want to let these people down?
You do feel the pressure, I mean I still feel that now. You want to keep up the same standard or do it better. The way I guess I address that is to go sideways, not try to take it as it is and try to make it better – let's do a different way of making it, different graphics, different ways of controlling it and that sort of thing. There was a lot of work, though, I couldn't do the same now. The longest I ever did actually was not on *Football Manager*, it was on *President*, which was a deadline. The toughest thing I did, where I had to get it done by a specific time to get it manufactured, and I remember I worked 72 hours continuously to finish that, without sleep. I don't think I could do that now! ▶



» [Amstrad CPC] The addition of more detailed match highlights boosted *Football Manager 2*'s appeal.

▶ That was quite an ambitious game as well...
Then I drove over 100 miles, after the 72 hours, across the country to get it manufactured. I did have the Porsche at that time – I drove over 100 miles with it...

Not over the speed limit, I hope!
It may have been... In the middle of the night, 3:00am, and you know Bournemouth, so I was going to Weston-Super-Mare...

Were you just driving around Westover Road? Because that's where all the Porsches and the boy racers hung out... That's what you were doing, wasn't it?
No, what I did – this is how crazy it was – I knew if I drove cross-country and I went slow I'd fall asleep at the wheel, because I hadn't slept for three days. But the safest way I could think of, I drove to Southampton, and then up to Newbury, and then across the motorway and as I pulled down off the motorway at Weston-Super-Mare, a police car was coming down on the road, and I thought 'You missed me!' The other thing was that I drove all the way with the windows open, and it was winter. My partner at the time was complaining bitterly about the cold, and I said "If I shut the windows I'll go to sleep, so I'm not shutting the windows." I was going quite quickly, but, of course, under 70 miles per hour.

Well ultimately it was for a good cause, because the game got there on time. Where did the idea of making a game about a President come from, then?
That probably originally was triggered back with playing the board games. Although *Football Manager* is about football, it is a strategy game and that's really what I like doing. I could do an arcade game, and at some point I'll probably try it just for fun, but it's strategy games that I like and I just got the idea – it'll be an oil-rich country, so there will be oil exploration going on, and I thought there are games about the people and how you get on with politics so I'll have politics as well, and then I also decided to have wars going on as well. So you had all three things interacting and that's what I was trying to do. I wanted the oil thing to be there, with planes flying over and bombing and stuff like that. It was a pretty tough game to write.

So how did that one sell, compared to the *Football Manager* games?
It didn't sell as well as *Software Star* but it also got really trapped, I remember, in the deal I was doing with Prism Leisure to work for them as well. Its marketing dropped off and it didn't get the support it wanted, so it possibly could have done better if it had not been caught in the middle of a transaction.

“I remember I worked 72 hours continuously to finish that, without sleep. I don’t think I could do that now!”
Kevin Toms

Why did you stop making games for 13-odd years?
I was always writing software, for the European Space Agency, for City of London banks, for multimedia companies, I never stopped, just did different things. It was not that long not writing games, just that long duration of unpublished games, perhaps.

Why did you decide to move to New Zealand?
Totally a lifestyle choice. And, by the way, it is a lot warmer and sunnier than most people realise!

One of the things now is that you’re still making football management games – you have one called *Football Team Coach*, but you’re changing the name aren’t you?
It’s because too many people have said to me that they can’t find the game on the App Store – that’s one reason, at least. I realised that the name is a little bit too generic. Unless I give people a direct link to the game, they can’t find it. The other thing is that a lot of people said to me that I should do what I did before and be more closely linked to the game. So I decided to change the name of the game from *Football Team Coach* to Kevin *Toms Football*, which makes it clearer that it’s coming from me.

Where did the idea for this version come from? Because one of the things I love about it is that it still looks like an older game. Was that intentional?
Yeah. It’s deliberately got a retro feel but it’s not a copy of an old game or anything like that, it’s a brand new game with a brand new way of working. The animation of the match itself, you see a lot more than in the original games. At the same time it’s very straightforward controls and very straightforward attributes of players, there’s not lots of detail. And you’ll notice there’s not even a list of players in your team – they’re shown on the screen where you pick them.

Lastly, have you actually played the *Football Manager* game that Sports Interactive makes?
Yes, I have, yeah.

What do you think of it?
It’s a very, very good game – it’s a great game obviously, but it’s not my kind of game.It’s very different from the games you used to make. If I were to make an analogy – it’s not a very good analogy, but I’d say car and motorbike. They’re both forms of transport, they’re both football management games. But some people want to drive a car and some people want to ride a motorbike – they’re very different experiences, and I think they’re as different as that. I don’t see myself in any way in competition with Sega’s game, I think that there’s a market for that, and people like the detail and statistics of that game. I can’t work that hard to play – I’m too lazy to work that hard to play a game. That’s the difference – mine is much more easily accessible and it doesn’t worry about the detail. The detail’s kept underneath. ★

WIN 1 OF 3 SIGNED GAMES!

Amstrad, C64 and Spectrum copies up for grabs!

■ Fancy winning a copy of the original *Football Manager*? Of course you do. Entry couldn’t be easier, simply send us a photo of yourself doing your best football manager impression to Twitter (@RetroGamer_Mag, Facebook (RetroGamerUK) or email (retrogamer@imagine-publishing.co.uk). You’ll also need to list which version you’d like to receive in order of preference. Winner to be announced in **Retro Gamer** 147. Closing date 23rd September 2015.

”

Booty

SAVE YOUR DOUBLOONS, LADS

» ZX SPECTRUM » JOHN F CAIN » 1984

If you can remember when the government owned British Telecom, then you can probably remember a time when budget games were just a bit iffy – it's fair to say that you got what you paid for. But by the end of 1984, all of that had changed. BT had been privatised, gone into software publishing with the Firebird range and was releasing budget games that were every bit as worthwhile as their full-price competitors.

In *Booty*, you take control of a cabin boy trying to collect treasure aboard a ship, which takes the form of a series of connected platforming rooms. The task was complicated by the presence of enemy pirates, not to mention disappearing floors and an elaborate maze of keys and doors. It wasn't easy, but with some bold visuals and a fitting sea shanty tune it was always enjoyable – even if you did occasionally run afoul of a booby-trapped bit of loot at just the wrong time.

For all of *Booty*'s qualities as a game, it was always that pocket money price that made it so sweet. At £2.50, it felt just as much a piece of booty as anything you'd pick up in the game. Quality budget games had arrived, a broadside fired across the bow of full-price competitors – and alongside the likes of Mastertronic and later Codemasters, Firebird helped to drive acceptance of budget games amongst retailers, allowing cash-strapped players to fill their own treasure chests. We'll raise a bottle of rum to that!

TREASURE 116

retro GAMER SIZZLER

>> We take a look at Rare Replay, an incredible collection that spans 30+ years and five gaming generations. We also discover if The Legend Of Grimrock stacks up on iOS and take a look at Pac-Man 256

[Xbox One] Jetpac remains as fun to play now as it did in 1983.

Rare Replay

THE XBOX ONE'S FIRST ESSENTIAL EXCLUSIVE FINALLY ARRIVES

INFORMATION

- **FEATURED SYSTEM:** XBOX ONE
- **ALSO AVAILABLE ON:** N/A
- **RELEASED:** OUT NOW
- **PRICE:** £19.99
- **PUBLISHER:** MICROSOFT STUDIOS
- **DEVELOPER:** RARE LTD.
- **PLAYERS:** 1-32 (DEPENDING ON GAME)

From the moment *Rare Replay* kicks off with a delightfully silly song (sung of course by Rare's staff) you know it's going to be something special. Adopting a classic theatrical approach, the presentation of *Rare Replay* is without competition and it's obvious that the entire project is a huge labour of love. There have certainly been plenty of great compilations over the years, but none have us this excited about their content like *Rare Replay* has. And there's a good reason to be excited, because we've never witnessed anything on the scale of *Rare Replay*. While other companies have offered a generous look at their back catalogues (Sega and Capcom immediately spring to mind) they've always been incomplete, choosing to focus on a particular area of time.

Rare Replay on the other hand is a dazzling look back at the company's entire history, celebrating both its highs and its lows. It even goes one better than its tagline of "30 years, 30 games" suggests by covering seven important games from the Ultimate years. Yes we could get indignant about the fact that *GoldenEye 007*, *Starfox Adventures* and the *Donkey Kong Country* games have not been included, but licensing trickery meant that it was never going to happen. Even these omissions can't hide the fact that *Rare Replay* represents incredible value for money.

The sheer value continues with the introduction of a large number of videos that look at everything from the creation of classic games, to unseen footage and unheard musical tracks.

It's certainly a little twee in places but the content still offers some amazing anecdotes and great insight into what drives Rare as a company. It's something of a shame, then, that the best stuff has been locked behind the stamp system that *Rare Replay* features. Unlocking achievements, also unlocks stamps, which slowly allows you to gain access to all the cool extras. Typically, the most desirable videos (the canned games and unheard music) are the last to be unlocked.

While the presentation throughout *Rare Replay* is outstanding the emulation of the games isn't quite up to the same high standards. The 8-bit and N64 games seem largely faultless, with the NES and Spectrum offerings even featuring the flicker of the originals, an effect we actually found

» [Xbox One] The presentation is glorious, taking the approach of an old theatre house that is absolutely full of classics.

BRIEF HISTORY

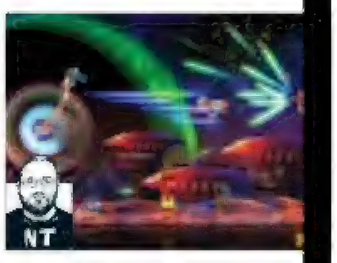
» Tim and Chris Stamper set up Ultimate Play The Game in 1982, only to rebrand the company as Rare in 1985. It formed a long-lasting relationship with Nintendo, released a huge number of critically acclaimed games and was eventually acquired by Microsoft in 2002 for an astonishing $375 million.

★ PICKS OF THE MONTH

DARRAN

Rare Replay

An outstanding array of games alongside insanely good inside access makes this amazing value.



NICK

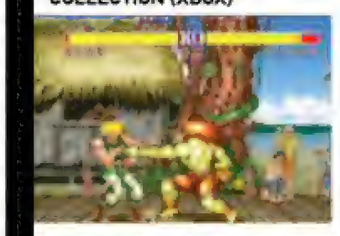
Rare Replay

There have been a lot of great compilations, but few can match the sheer majesty of *Rare Replay*. It's simply essential.

★ WHY NOT TRY

▼ SOMETHING OLD

CAPCOM CLASSICS COLLECTION (XBOX)



▼ SOMETHING NEW

SEGA MEGA DRIVE ULTIMATE COLLECTION (XBOX 360)

JUST A SCORE
GIVE YOUR SCORES · FOLLOW OUR SCORES
Download on the App Store

» [Xbox One] *Rare Replay* marks the first time that *Battletoads Arcade* has been on a home system.

» [Xbox One] Many of the NES games like *Cobra Triangle* have aged surprisingly well.

quite charming. The Xbox 360 games, (which are emulated using the Xbox One's backwards compatibility feature) aren't quite as flawless, with the odd frame-rate drop here and there. It's most prevalent on *Nut & Bolts*, but it's certainly not a deal-breaker of any kind. The 8-bit games also feature the ability to view the games as if you were using a CRT. While we didn't like this effect on last month's *3D Streets Of Rage 2*, it's far more effective on a bigger TV.

Rare has also made additional tweaks to the games, with the most obvious changes being to fix the glitch that would typically ruin *Battletoads* and adding a brand new control system to *Jet Force Gemini*. The latter still makes the game harder to play than we'd like (third-person shooters have moved on vastly since its release) but it's a welcome inclusion all the same and shows just how much attention Rare is paying to its fanbase.

Interestingly, Rare chose not to emulate *Grabbed By The Ghoulies* (the one Xbox game on the compilation) porting it instead. The results are marvellous, thanks to it running in 1080p and at 60 frames per second. It's also a fun game, and never gets the credit it deserves, so it's pleasing to see Rare treat it with so much respect here.

In addition to the 30 available games, Rare has also included Snapshots for the Spectrum and NES releases. Similar to the recent NES Remix games, they require you to do small mini challenges that range from finding the exit in *Sabre Wulf* with just four lives to fuelling *Jetpac*'s spaceship without using your lasers. They're admittedly not as in-depth as those found in Nintendo's game, but Nintendo's game didn't come with full releases of the games it was having fun with.

Even if the Snapshots weren't included, there's an insane amount of gameplay to be found in *Rare Replay*. Some of the 30 games have inevitably dated — *Underwurlde* and *Lunar Jetman* are an exercise in frustration, while *Killer Instinct Gold* was never a top-tier fighter to begin with — but the vast amount of games hold up incredibly well. With *Sabre Wulf, Knight Lore, Cobra Triangle, Banjo-Kazooie, Conker, Kameo* and *Viva Piñata* being clear highlights. The included games also cover a wide amount of genres, meaning you should find something you enjoy, even if you aren't well-versed with Rare's catalogue of games.

There are of course quibbles, but they pale in comparison when you consider the value for money and great content that *Rare Replay* represents. It's quite simply the best and most exhaustive compilation that we've ever played. ★

ALL THE GAMES

Our guide to what you should and shouldn't play

- **JETPAC** ★★★★★
- **LUNAR JETMAN** ★
- **ATIC ATAC** ★★★
- **SABRE WULF** ★★★★★
- **UNDERWURLDE** ★
- **KNIGHT LORE** ★★★★★
- **GUNFRIGHT** ★★★
- **SLALOM** ★★★
- **R.C. PRO-AM** ★★★★★
- **COBRA TRIANGLE** ★★★★
- **SNAKE RATTLE 'N ROLL** ★★★★
- **SOLAR JETMAN** ★★★★
- **DIGGER T. ROCK** ★★★
- **BATTLETOADS** ★★★
- **R.C. PRO AM II** ★★★★
- **BATTLETOADS ARCADE** ★★★
- **KILLER INSTINCT GOLD** ★★
- **BLAST CORPS** ★★★★★
- **BANJO-KAZOOIE** ★★★★★
- **JET FORCE GEMINI** ★★★★
- **PERFECT DARK** ★★★★★
- **BANJO-TOOIE** ★★★
- **CONKER'S BAD FUR DAY** ★★★★
- **GRABBED BY THE GHOULIES** ★★★★
- **KAMEO: ELEMENTS OF POWER** ★★★★
- **PERFECT DARK ZERO** ★★★
- **VIVA PIÑATA** ★★★★★
- **JETPAC REFUELLED** ★★★★
- **VIVA PIÑATA: TROUBLE IN PARADISE** ★★★★
- **BANJO-KAZOOIE: NUTS & BOLTS** ★★★★★

In a nutshell

This is not only a loving tribute to one of Britain's great developers, but also a great insight into a vast catalogue of superb games. No gamer should be without it.

10 RetroGamer_Mag scored **10** for Rare Replay

Follow our scores on JUST A SCORE

"Rare Replay is a dazzling look back at the company's entire history, celebrating both its highs and lows"

» [Xbox One] A lot of people don't enjoy *Perfect Dark Zero*, but the multiplayer is still fun to play.

» [Xbox One] Not all the games have aged well, with *Killer Instinct Gold* being one notable example.

» [Xbox One] The CRT emulation works a lot better on bigger TV screens, adding a nice level of authenticity.

RETRO ROUND-UP

>> Every month we look at all the classics and latest releases that are available to buy or download

★ PICK OF THE MONTH

3D Gunstar Heroes

» **System:** 3DS » **Cost:** £4.49 » **Buy it from:** eShop

As with the recently released *Streets Of Rage 2*, *Gunstar Heroes* has been one of the most requested games to be ported to 3D. Indeed, M2 itself selected it right from the beginning, but was concerned that the techniques needed to port it weren't going to be possible. After porting various other games, including *Space Harrier* and *After Burner II*, it's now got the confidence to handle Treasure's tour-de-force Mega Drive game, and what a fantastic piece of work it is.

The 3D effect is quite simply phenomenal, arguably one of the best examples from Sega's 3D range. There's always a pleasing sense of perspective, but there's also constantly things happening behind and in front of the heroes, creating a really exciting dynamic that breathes fresh life into the 22-year-old game. M2 has also added the same tweaks that appeared in *3D Streets Of Rage 2*, so you can choose between versions, replicate an old CRT, choose your PSG chip and much, much more. It once again disappoints by only having a local two-player mode, but it's the only disappointment to be found.

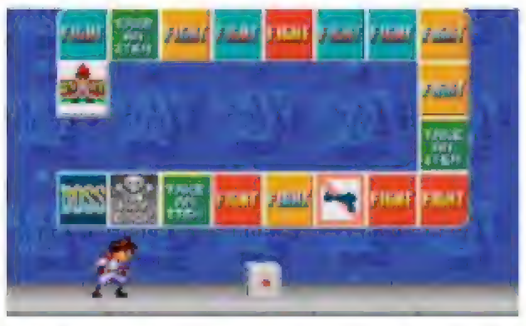
By far the best addition to *3D Gunstar Heroes* is the excellent new Gunslinger mode. In the original game you could create new weapons by combining different gun combinations of the four guns you could pick up. Typically saving your favourite combination for particular bosses. You also had to decide whether you wanted to have free shot movement (run and aim) or fixed shot (stay in one place to shoot in any direction). Now you can do everything on the fly, switching weapons at will and changing shooting stances with a flick of the X button. It makes it a little easier, but it also adds some much needed flexibility to the game, making it even more enjoyable.

A killer conversion of the Mega Drive classic from M2.

9 RetroGamer_Mag scored **9** for **3D Gunstar Heroes**
Follow our scores on JUST A SCORE

“The 3D effect is quite simply phenomenal”

» [3DS] The sense of perspective is superb thanks to the amazing the 3D effects.



» [3DS] Being able to switch between weapons at will certainly changes how you approach the game.

Legend Of Grimrock

» **System:** iOS
» **Buy it for:** £3.99 » **Buy it from:** App Store

It's taken three long years for *Legend Of Grimrock* to make its way over to iOS, but it has certainly been worth the wait, as it's a lovely miniaturised port of the excellent PC original. If you've never played or even heard of *Legend Of Grimrock*, it's a brutally tough, but immensely enjoyable *Dungeon Master*-styled adventure through a dangerous dungeon. There are fiendish puzzles to negotiate, dangerous monsters and plenty of character classes to master. The gameplay is all present and correct in this port and while the graphics have been slightly downgraded, the actual interface is superb, making it far easier to play than the PC original. Highly recommended.

9 RetroGamer_Mag scored **9** for **Legend Of Grimrock**
Follow our scores on JUST A SCORE

Pac-Man 256

» **System:** Android (tested), iOS
» **Buy it for:** Free-to-play
» **Buy it from:** Google Play, App Store

It's amazing how, 35 years from the original game's release, people are still finding ways to do new things with *Pac-Man*. In this case, developers Hipster Whale have given it an endless runner-style makeover, with the yellow peril trying to stay ahead of the 'Level 256 glitch' that's corrupting the entirety of the endless maze. You'll have to avoid all sorts of ghost types including sleeping ghosts, but you get some cool power-ups to help even the odds. It's an excellent mobile game, and one that you can even pay to remove the free-to-play elements from – though they're unobtrusive enough that you may choose not to.

8 RetroGamer_Mag scored **8** for **Pac-Man 256**
Follow our scores on JUST A SCORE

Mega Man Legacy Collection

» **System:** Xbox One (tested) PC, PS4
» **Buy it for:** £14.99 » **Buy it from:** Online

Capcom's compilation just looks stingy next to *Rare Replay*. Six games just isn't good value for money whatever way you spin it (it can't even manage to include the four other classic *Mega Man* games) leaving you with just the challenge mode and a large amount of fan paraphernalia (which is admittedly well-presented). The 50 challenges will certainly offer you plenty of replay value, particularly as they're as stubbornly tough as the six games they're based on, but this is still a pretty big disappointment for fans of Capcom's iconic blue hero. This is one for hardcore *Mega Man* devotees only.

6 RetroGamer_Mag scored **6** for **Mega Man Legacy Collection**
Follow our scores on JUST A SCORE

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Welcome to Homebrew

[Web] Shooting action from Sharpshooter.

» As a tribute to Satoru Iwata, John Riggs decided to put Iwata into one of his creations and Balloon Fight – Iwata Edition came to be with a sprite from Mother which bore a resemblance and some Kirby-inspired balloons. John's YouTube video behind Kikstart.eu/iwata-balloon-nes explains what went into this hack and has a link to the patch

GET TWO BATTLES FOR ONE

The latest game jam being held by indie showcase website Game Jolt is called Indies Vs Gamers and it's little different to their previous efforts; at the time of writing the votes are still being counted, but once that's out of the way all of the entries are to be used for a high score competition. This will be split into two parts, with Game Jolt users first competing with each other to get the best scores before the top five games are then handed over to big name YouTubers PewDiePie, Markiplier and Jacksepticeye to see if they can do better.

Of course, we understand that those names might not be familiar to everybody reading but it's worth noting that their channels combined have over fifty million subscribers – PewDiePie accounts for thirty eight million of those on his own – so their involvement should hopefully give the popularity of indie gaming a good boost while anything they showcase on their channels is due a staggering amount of attention on top of that.

There are over 400 entries to browse through with the overarching theme for this game jam being 'arcade' so there's lots of action-oriented games which take their inspiration from both the classic coin-ops of the Seventies or Eighties and more modern fare. So, along with reworkings of classic arcade titles such as *Space Invaders*, *Robotron: 2084* or the into the screen driving of *Leisurely Sunday Drive 4 – The Reckoning*, there are games inspired by Flash-based titles like *Canabalt* and even a few parodies of the people presenting the event such as *100% Accurate Youtube Simulator 2015*. Kikstart.eu/indies-vs-gamers goes to the Indies Vs Gamers homepage and we'll just add a quick warning for those who might not be aware to expect some harsh language, particularly from the YouTubers.

> **"The overarching theme for this game jam being 'arcade' so there's lots of action-oriented games"**

Incoming

A polished version of Jet Set Willy is on the way alongside a stupidly tough platformer for OCS Amigas

KIKSTART.EU/JSW-2015-SPEC

▲ *Jet Set Willy 2015 Bug Fixed Edition* for the Spectrum does exactly what it says on the tin!

▼ It's at an early stage, but *Street Brawler* will be a one-on-one fighter for the Atari 2600.

KIKSTART.EU/BRAWLER-2600

WWW.SQRXZ.DE/SQRXZ-3/

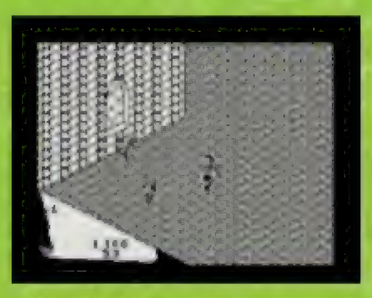
▲ The sadistically difficult platform puzzler *Sqrxz 3* is now available for OCS Amigas with 1Mb or better.

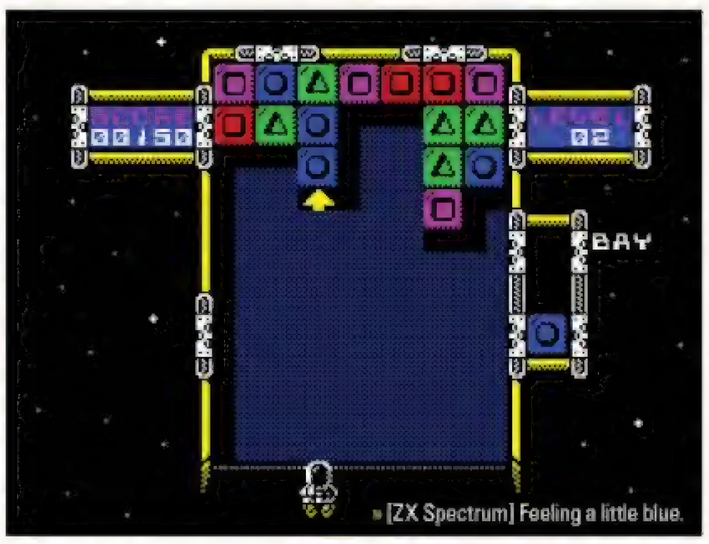
NEW GAMES NEEDED

If you have a homebrew project you would like to see featured then please contact us at:
retrogamer@imagine-publishing.co.uk

A LITTLE SWORDPLAY

After the recent conversion of *The Great Escape* where the C64 version was dismantled and modified to run on the Atari 8-bit, the next isometric 3D game to get the port treatment is going to be *Fairlight*. The Atari Age thread can be discovered behind Kikstart.eu/flt-prv-a8 and at the time of writing it's sort of playable in that the player and guards can roam around the playfield or engage in combat, but none of the objects can be picked up or used to progress through the game. It'll be worth keeping an eye on the discussion to see how this progresses.


» [Atari 8-bit] Have at thee.



» [ZX Spectrum] Feeling a little blue.

ONE, TWO, THREE

***The Return Of Traxtor* is a match three game for the Spectrum which has a sci-fi theme to it.** You take control of a spaceship at the bottom of the screen which uses its tractor beam to remove tiles from the area above it into a storage bay; tiles can then be launched upwards to form groups which are removed.

It's possible to dispose of more than just the tiles being manipulated if the ones around them are left unsupported, and trying to keep things under control is important. Find it at Kikstart.eu/return-traxtor-spec.

▼ There's sliding block puzzle action from *Glow Path Basic* on the C64 but it's a little bit clunky.

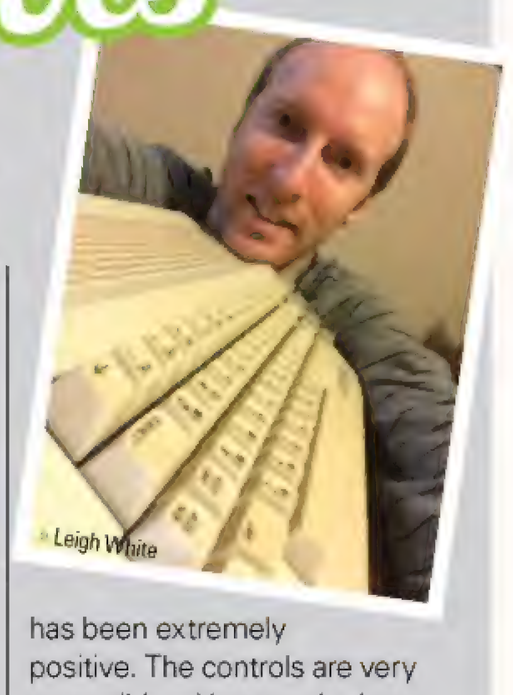
KIKSTART.EU/ GLOW-PATH-C64

Homebrew heroes

Leigh White has spent quite some time creating Jam It for the C64, so we went one on one to find out more about the process of building a basketball game

» [C64] He shoots...

» [C64] ...he scores!


» Leigh White

So where did the idea for *Jam It* come from?
I'm a big basketball fan and my two favourite C64 sports games were *One On One*, (or *Dr J Vs Larry Bird)* and *GBA Basketball.* I always felt that merging the strong qualities of each should result in a pretty decent game.

A large impediment was that I had no major experience on the C64 to know what I could squeeze in. This led me to frame many ideas within self-imposed technical limits – for example, a single load, no scrolling, no sprite multiplexing. I also chose a 2-vs-2 game rather than 3-vs-3 game; AI complexities aside, working out a good system for passing the ball to the intended target in a three-player team was going to be too tough a task.

The slow motion dunks, stats, cheerleaders, replays and commentary were really just to try and push things as close to being like a pro game.

And roughly how long did it take from start to end?
About four years or so, starting late 2010 and finishing July 2015. I'd estimate about 800 hours.

Was the control system tricky to get working the way you wanted?
Surprisingly it mostly wasn't. Shooting, jumping and stealing mechanics are straight from *One On One* and I knew [they] would work well. After the button double tap was refined for passing, it was reused to change players in defence.

In testing, I noticed a strategy which depended on making defensive switches, this led to implementing the button hold/release – same as shooting.

Activating the highlight shot was the one difficulty. Initially only I could pull it off having played so much – players loved seeing the dramatic dunks but just couldn't do it themselves. I changed this to double tapping the joystick down when in possession of the ball and it became much more accessible. Players new to the game overlook it until it is shown, but once they realise the advantage it gives in close games they really can't live without it.

How has the feedback been so far from players?
The feedback from demoing at a number of large game expos has been extremely positive. The controls are very accessible – I just teach players how to pass/shoot and the rest they pick up by playing.

I also found having 'genuine retro graphics' (to paraphrase a recent player) makes the game less intimidating if you don't follow basketball. Realistic graphics in sports games can give an impression there'll be a fairly steep learning curve.

Is there anything you would have done differently with the advent of hindsight?
If I had more some memory it would mainly be cosmetic graphic additions and possibly some other configuration options, but there's no significant gameplay changes I would make. The front end looks sparse but the trade-off is for the added action that takes place in the main game.

And finally, have you decided on your next project?
I've made a four-player tennis prototype and a split-screen *Excite Bike*-like prototype, both for the C64. I'm also strongly considering rebuilding *Jam It* for modern gaming platforms.

» [C64] Cover art by none other than Oli Frey!

» [C64] Bits, bytes and pieces.

THE ULTIMATE GUIDE TO AMIGA PD GAMES

» **FORMAT:** COMMODORE AMIGA » **DEVELOPER:** CHRISTIAN CLARKE, ROBERT HAZELBY, GRAHAM HUMPHREY, LIFESCHOOL » **DOWNLOAD:** KIKSTART.EU/AMIGA-PD-BOOK » **PRICE:** £1.50 (KINDLE EDITION)

Here at Retro Gamer we use the term 'homebrew' to describe programs created by amateur developers, but during the Eighties and Nineties they were far more commonly known by titles like public domain, freeware or shareware. And, because we're talking about a time before the internet made its way into our homes, these games, utilities and demonstrations were often distributed by public domain libraries who posted out disks to customers containing software chosen from their catalogues. PD and shareware had no quality control so some of this software wasn't even worth the minimal fee taken for the blank disk, postage and duplication, but at the same time there was some cracking software to be found.

The Ultimate Guide To Amiga PD Games has been constructed around a list of one hundred releases which were chosen by posters to the English Amiga Board forum. There should be something for everyone with shoot-'em-ups, platformers, puzzle games, *Dizzy*-style or point-and-click adventuring, clones of classic coin-ops, *Tetris* variants, strategy and role-playing games to choose from.

There's also a chapter of mentions that didn't quite make the main list, a section dedicated to upcoming releases, and a few interviews with *Alien Fish Finger* developer David J Cruickshank and Michael Welch who coded *Scorched Tanks* which placed second on the list. Overall, this is a good read which has been put together by people with a love for gaming and even the most dedicated fan of the Amiga should take a look since there's bound to be something they haven't tried. All royalties from the sale of *Ultimate Guide To Amiga PD Games* goes to Mencap with the authors asking anybody who enjoyed reading it to make a voluntary donation as well.

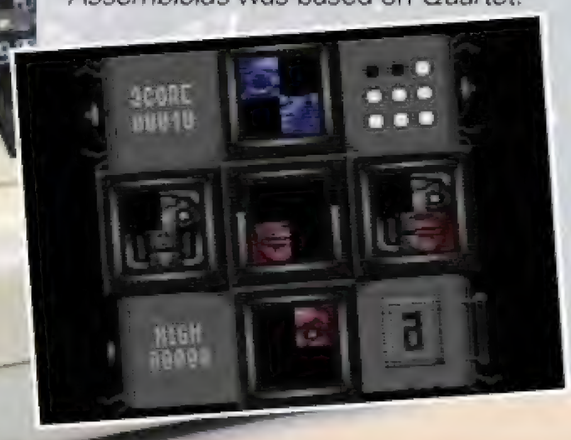
9 RetroGamer_Mag scored **9** for **The Ultimate Guide...**

Follow our scores on JUSTASCORE

Make this

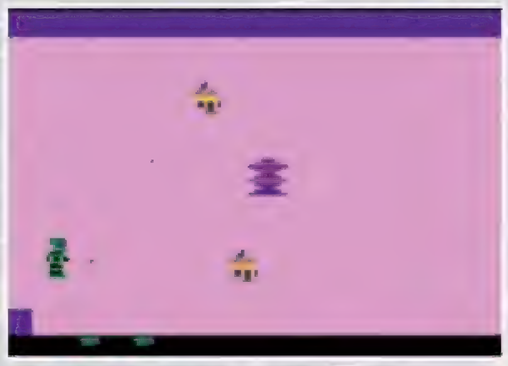
Every month our very own Jason Kelk will be teaching you handy new programming techniques. This month: demaking recent games

1 Last time we considered the options that porting existing code from other retro systems offered, but demakes – recent games reworked for 8-bit and 16-bit systems – are another option. iOS or Flash-based puzzles can be a good starting point – *Assembloids* was based on *Quartet*.



2 The action-oriented *Super Crate Box* is another title that has inspired more than one homebrewer, leading to *Super Bread Box* for the C64 and the more recent Speccy game, *Super 48K Box*. Both replicate Vlambeer's original game.

3 *And You Have To Win The Game* on the C64 illustrates how tricky these things can sometimes be because, although the original was designed with a retro look, cramming all of those graphics and screens into a 64K system proved challenging!



4 Sometimes it's just better to take just the essence of a game without trying to replicate it visually; *Halo* for the Atari 2600 does this, paring down the experience until it stands a chance of working within an 8-bit's finite resources.

LASERBALL 2015

» FORMAT: ATARI ST » DEVELOPER: THOMAS ILG
» DOWNLOAD: KIKSTART.EU/LASERBALL-ST » PRICE: TBC

Each puzzle in *Laserball 2015* has the same goal, getting the laser beam to a red target and keeping it locked on. Manipulating the beam is done with mirrors – some of which can be moved but won't stop until they bump into something else – and there are lots of items that get in the way too including doors which need to be zapped from the side to unlock a path through, control blocks which dissolve when exposed to the laser but hobble one of the mirrors in the process and a level-ending bomb.

This is a brain bender of a game but its entertaining at the same time and, fortunately, there is an option from the main menu to restart the level if things go badly awry. And for those who'd like to create their own levels to challenge other players it comes with an integrated level editor.

8 RetroGamer_Mag scored **8** for LASERBALL 2015
Follow our scores on JUST A SCORE

» [Atari ST] Just a few mirror turns to go

ZOMBO

» FORMAT: ZX SPECTRUM » DEVELOPER: MALCOLM KIRK
» DOWNLOAD: KIKSTART.EU/ZOMBO-SPEC » PRICE: FREE

When Interstellar Flight 303 unceremoniously crash lands on the sentient world of Chronos it falls to a government-created, but surprisingly nice, human/zombie hybrid called Zombo to rescue the survivors before the planet kills them. Both the lead character and storyline have been taken from a 2000AD series but reworked for the game, which is a exploration and collection affair where Zombo must be guided around the flip screen map.

His task is to pick up the survivors, find a handy weapon and collect the three colour-coded keys; there's also an extra life to grab and a random penguin which seems to serve no purpose. Sadly this bizarre but amusing game suffers from some bugs which get in the way of saving Flight 303's passengers so completing *Zombo* requires some luck as well as skill.

» [ZX Spectrum] What's behind door number 2?

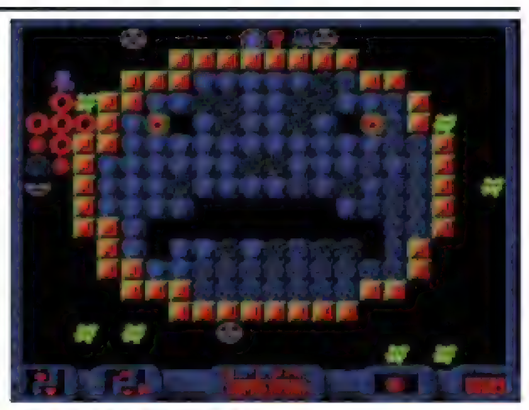
6 RetroGamer_Mag scored **6** for ZOMBO
Follow our scores on JUST A SCORE

BOMBERMAN: MILENA'S TEST

» FORMAT: ELECTRONIKA BK-0010/11M » DEVELOPER: ADAM SOFTWARE
» DOWNLOAD: KIKSTART.EU/BOMBERMAN-BK0011 » PRICE: FREE

This is an action puzzler with explosive devices; the objective on each level is to get a key and reach the exit, the patrolling nasties can be avoided or blown up. As with the *Bomberman* games, the bombs will detonate a fixed amount of time after being dropped, destroying passing enemies and doing damage to some of the blocks within their blast radius with the latter revealing items or even extra nasties when obliterated.

Getting things going will probably be tricky for anyone who can't read Russian – follow Kikstart.eu/files/bmt-docs.php for the machine-translated instructions and activating one of the cheats to get five bombs at the start of play seems to be a must because it doesn't want to drop them otherwise, but this is an enjoyable, but often frustrating, game.



» [BK-0010/11M] Did I get it?

7 RetroGamer_Mag scored **7** for BOMBERMAN: MILENA'S TEST
Follow our scores on JUST A SCORE

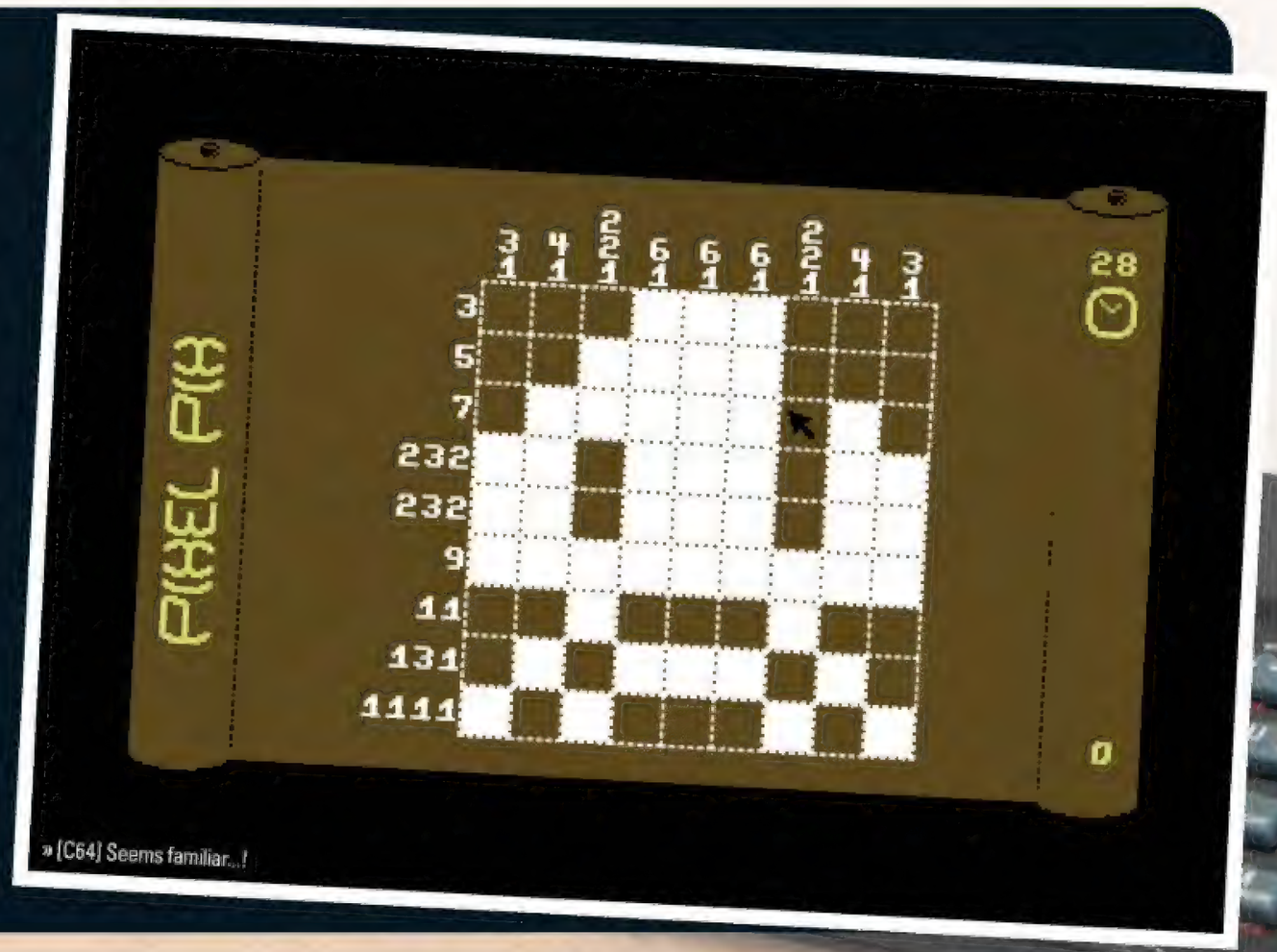
PIXEL PIX

» FORMAT: COMMODORE 64 » DEVELOPER: SIMON QUERNHORST
» DOWNLOAD: KIKSTART.EU/PIXEL-PIX-C64 » PRICE: FREE

Here we have a nonogram puzzle game where a picture is created against the clock from clues around a nine by nine pixel grid. These clues are numerical so a number such as 232 means that there will be groups of two, three and two pixels across a row or down a column with gaps between each group. Sometimes the positioning is obvious – if the clue is nine then the entire row or column is set, for example – but more often it'll be a case of working out where some pixels must go from other clues.

There is a strict time limit on each of the levels which ramps up the difficulty, but all of the 20 stages can all be fathomed out usually with a moment of immense satisfaction as everything suddenly becomes crystal clear after having spent a frustrating age staring at the clues without any joy.

8 RetroGamer_Mag scored **8** for PIXEL PIX
Follow our scores on JUST A SCORE



» [C64] Seems familiar...!

MAILBAG

HAVE YOUR SAY... SEND US A LETTER OR MAKE YOURSELF HEARD ON THE ONLINE FORUM – **WWW.RETROGAMER.NET**

STAR LETTER

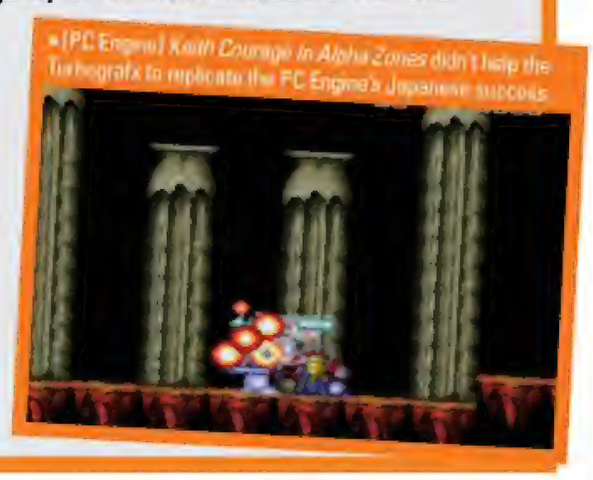
BUNDLE OF JOY

Hello Retro chaps!
Though I'm a regular reader and a bit of a retro fanatic, I've got to say that in many ways, things have improved over the years. As great as games were in the Eighties, I don't think I'll ever miss writing down lengthy passwords and loading games from tape. However, there's one thing that's gone away in recent times that I really do miss.

Whatever happened to pack-in games? It seems like console manufacturers in the old days had an incredible knack for picking games that perfectly represented their platforms – where would the Game Boy be without *Tetris*, or the Mega Drive without *Sonic The Hedgehog*? These were games that defined consoles. You can't think of one without the other. As great as it is to have the choice we have today with loads of bundles available, I can't help but think that a really strong bundled game is a key part of a console's identity.

What do you guys think? Part of me is convinced that it's just me getting old, but I can't shake the feeling that consoles don't have as strong an identity these days because of it.
Paul Ambury

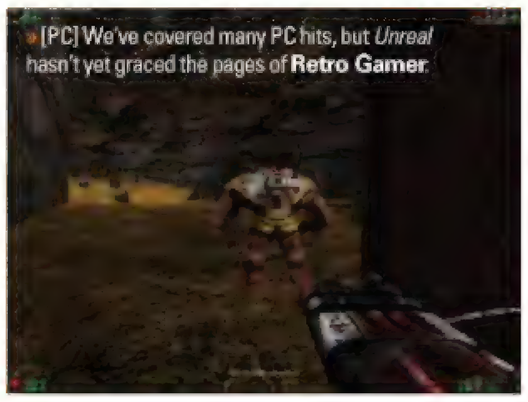
We can see where you're coming from – it's hard to imagine picking up a SNES without *Super Mario World*, and it's arguable that the Wii wouldn't have done as well without *Wii Sports* (arguably the last great pack-in game). Then again, even with consoles like the Master System where the game is inseparable from the machine, there are four or five different variations that people could have had. Also, for every *Sonic* or *Tetris*, there's a *Keith Courage In Alpha Zones* that struggles to impress, so we'd come down on the side of choice. It's a very interesting question for sure, though.


[PC Engine] *Keith Courage in Alpha Zones* didn't help the Turbografx to replicate the PC Engine's Japanese success.

DOS PROMPT

Hi **Retro Gamer**,
Thank you for your magazine. I really, *really* like it. Your magazine is my monthly blast from the past. But now I have a question that I cannot find answered on your forum. I have been reading the magazine for about two years but I'm missing features about DOS games. *No Larry, Warcraft, Space/Police/King's Quest, Civilization, Ultima, Dune 2, Command & Conquer, Unreal, Wolfenstein 3D, Cyberia, Might & Magic, Populous, Caesar* or a whole host of other pre-2005 DOS/Windows games. Were these games featured in earlier issues, or are you more console/home computer orientated? Thanks for your help and keep up the good work!
Mark Alphenaar

Hi Mark. You're right to suspect that we've covered many of these games in the past – *Leisure Suit Larry* was in issue 19, *Populous* in 44, *Command & Conquer* in 48, *Might & Magic* in 67, *Ultima* in issue 68, *Dune II* in 95 and *Civilization* in 112. We've also profiled developers, including Sierra in issue 31, id Software in 40, Westwood in 90 and Bullfrog in 110. You can buy digital copies of


[PC] We've covered many PC hits, but *Unreal* hasn't yet graced the pages of **Retro Gamer**.

issues at greatdigitalmags.com. As for the ones we haven't covered, keep watching this space!

TREASURES OF THE CASTLE

Hi **RG**,
Thought you'd like to see a few pics of some gaming artefacts I spotted at the Toy Museum at Mountfitchet Castle today. There are Binatone and Commodore machines plus others I didn't recognise or couldn't see enough of (any idea what the one saying Home Entertainment Centre along the bottom is?). I wanted to have a rummage but sadly it's all piled high like junk inside glass cabinets. Maybe we could stage a daring rescue attempt?!

Worth a visit though, it's a great museum. The early penny arcade *Pong* forerunners are in full working order too. Plus they have *The Simpsons Arcade Game* in the castle café…
Tim Fitches

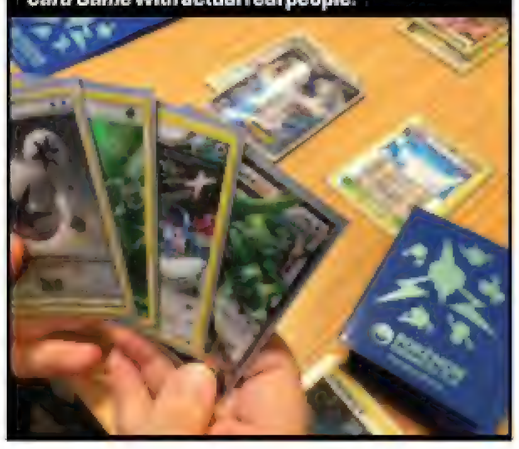
Thanks for the pictures! It certainly looks like an interesting place – Nick actually hails from that part of the country, so a visit is definitely on the cards. We're pretty sure that the unidentified console is a Rowtron Television Computer System, a variant of the 1292 Advanced Programmable Video System. The system had a variety of other models too, such as the Interton VC-4000 and Voltmace Database. Look out for some coverage of these forgotten machines soon.

FAMILY COMPUTER

Dear **Retro Gamer,**
How do you guys go about getting family members involved in your own retro-centric exploits? I've not had great

DISCUSSED THIS MONTH

Trading Card Games
Following our recent feature on the PC adaptation of *Magic: The Gathering*, we've found ourselves drawn back to trading card games. Darran's been keeping it retro with *Magic Duels: Origins*, Nick's been playing *SolForge* on iOS and Jon's discovered *Hearthstone*. Drew has been a little bit more sociable and played the *Pokémon Trading Card Game* with actual real people.



We see what Tim means about items being piled high – there's a bit of a jumble sale vibe here.

Don't forget to follow us online for all the latest retro updates

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success in getting the wife to consider playing any videogames with me (old or new) but my daughter loves watching me play through either of the N64 *Zelda* games. I must be doing something right at least as I've set up a wife-approved games room complete with four arcade machines, a garage with a further two cabinets and a study upstairs packed with well-organised consoles and cartridges. Bringing the arcade games into the house wasn't even my idea!

Man-cave of retro treasures aside, I still struggle getting my wife to take any real interest in my retro collecting & gaming hobby, however, I am a man with a plan but I'm going to need your help. Actually, if I'm being honest, it's my wife's plan – she just doesn't know it. Recently she's been getting into decoupage and has been liberally gluing small pieces of thin paper to the front of drawers in an arty-crafty manner and, whilst doing so, made the comment that you can decoupage anything, even plastic. This got me thinking; what if **Retro Gamer** included a few pages of iconic retro characters based around a particular console (the Dreamcast for example) and I made the suggestion that she decoupage one of my yellowing spare consoles with the cutouts!

So how about it then; do you fancy inserting a craft-based activity for your retro readership to encourage their friends and family to get engaged with the scene?

Phill Burton

Kids are easy to get involved, as they'll take interest in most of the things that happen around them. Adults are a little bit harder and the approach you take will depend on the person involved. As for printing craft-oriented material, it's not something we've considered before – however, if you need something in existing issues, the Pixel Perfect segments of our Ultimate Guide features might do nicely.

NEW FRONTIERS

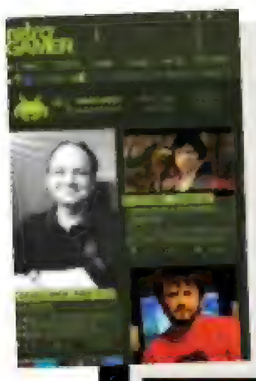
Hello Gentlemen of **Retro Gamer**, I recently started buying the mag since your PlayStation special and have very much enjoyed and appreciated your coverage of gaming, the late-Nineties in particular (before it started going a little bit wrong!).

After having discovered games I had never seen before in your latest issue, I felt compelled to thank you for what you're doing because if you don't do it, there's literally nobody else over here who will!!

Karl

Thanks for the very kind words, Karl. While we love revisiting old memories of games we played, it's always great to discover something that you've never played that stands alongside those nostalgic favourites. We're glad to help you do that!

» [PlayStation] We love introducing you to new games – like *Slap Happy Rhythm Busters*.



From the forum

» www.retrogamer.net/forum

Every month, Retro Gamer asks a question on the forum and prints the best replies. This month we wanted to know...

Your Neo-Geo Memories

Bluce_Ree
I could take or leave nearly all of the fighting games but *Garou: Mark Of The Wolves* is the only 2D fighting game that has a real sense of weight to it.

The Beans
It was the Loch Ness Monster of gaming among my circle. Everyone had heard of it. Some claimed to have even seen it. Nobody had the cash to provide actual evidence that it was real.

Mayhem
One of the guys I shared a flat with in my third year at university had a Neo-Geo. Yeah... we wondered how he was able to fund that and the games, *King Of Fighters '95* was a MAJOR player in the household, and we spent an awful lot of time on that game.

AceGrace
I've got an AES, and a Neo-Geo CD too. I have 17 games for the AES and about 25 for the CD. My favourite is *King of Fighters '98*. Utterly superb. I love my Neo-Geo stuff and would part with any other my other systems first.

Megamixer
I never had one and doubt I ever will but I'm glad that a lot of the games have been re-released on modern consoles in various compilations.

ArchaicKoala
Going to have to go with the game that mixed two of my favourite mid-Nineties fighters: *Fighters Megamix* – you can fight as the Daytona Hornet!

stvd
The Rolls Royce of the console world. In looks, build quality and also with its games. Favourite game? *Neo Turf Masters*, *Metal Slug* (all of them), *Viewpoint*, *Neo Drift Out*.

smccd
I first ran across the Neo-Geo arcade system in 1994 when I played *King Of Fighters '94*. The fighters had more character compared to *Street Fighter II*, and I also liked the idea of teams very much. When I learned there exists a home version of the Neo-Geo I saved my money and bought one. It's the jewel of my collection.

greenberet79
Never had one. I knew about them but they were generally a mystery. As a child of the Eighties arcade scene with a Speccy 48K at home, the goal of owning a Neo-Geo was virtually unattainable.

Nemesis
It had some good games but many felt overrated to me. I think the price persuaded people it was better than the reality.

retro GAMER

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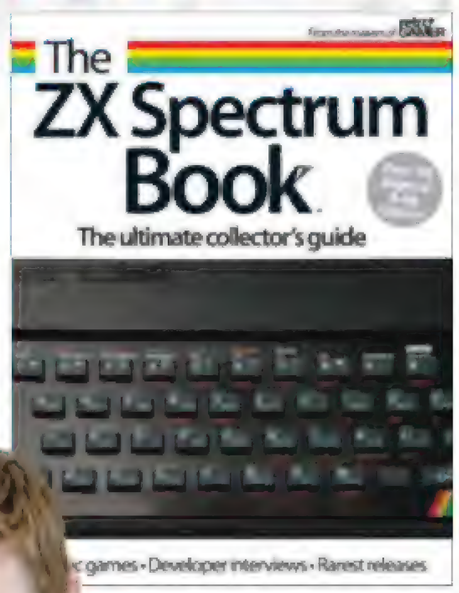

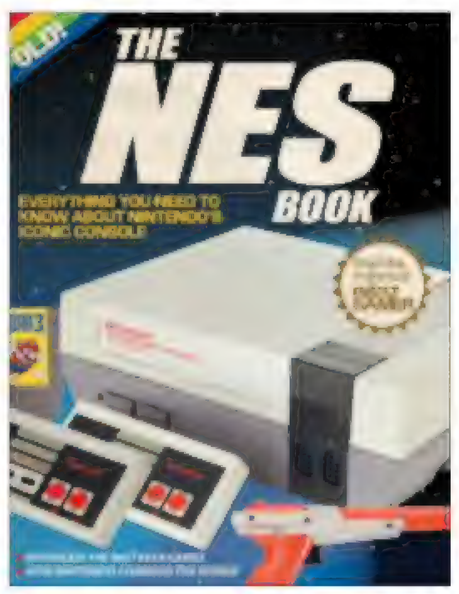

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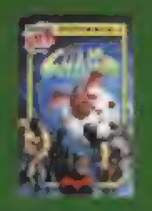

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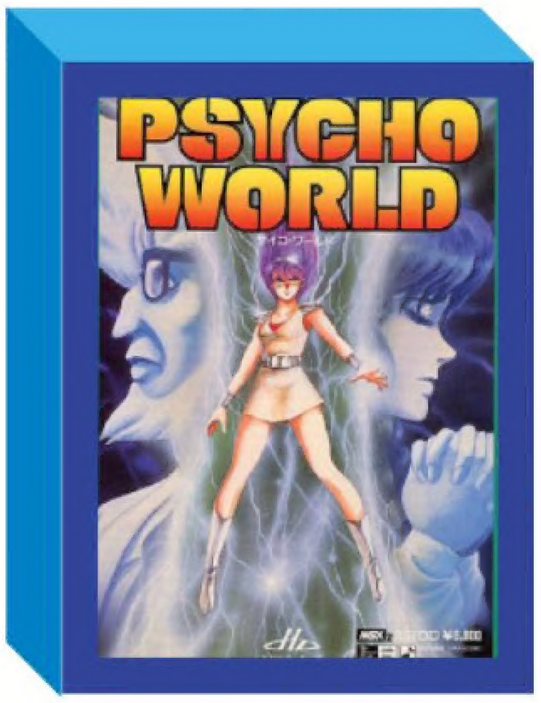
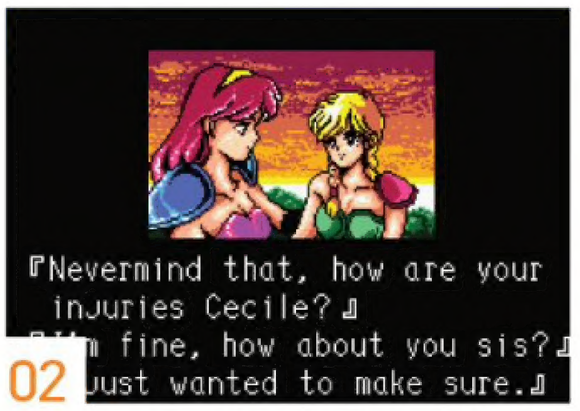


PSYCHO WORLD

» Sisters Lucia and Cecile were happy helping Dr Knavik with his experiments in extrasensory perception, but then an explosion wrecked everything at the lab – as explosions do. Turns out the good doctor had been experimenting on monsters, and – as they tend to do – the monsters turned a bit rebellious and ran off with Cecile. Let's join Lucia just after she completes the inevitable rescue mission...

01

» The lab is visible from here, which is nice. Rather less nice is that Dr Knavik turned out to be an alien, who was experimenting on the girls in an attempt to conquer Earth with powerful ESP powers. What an utter jerk.

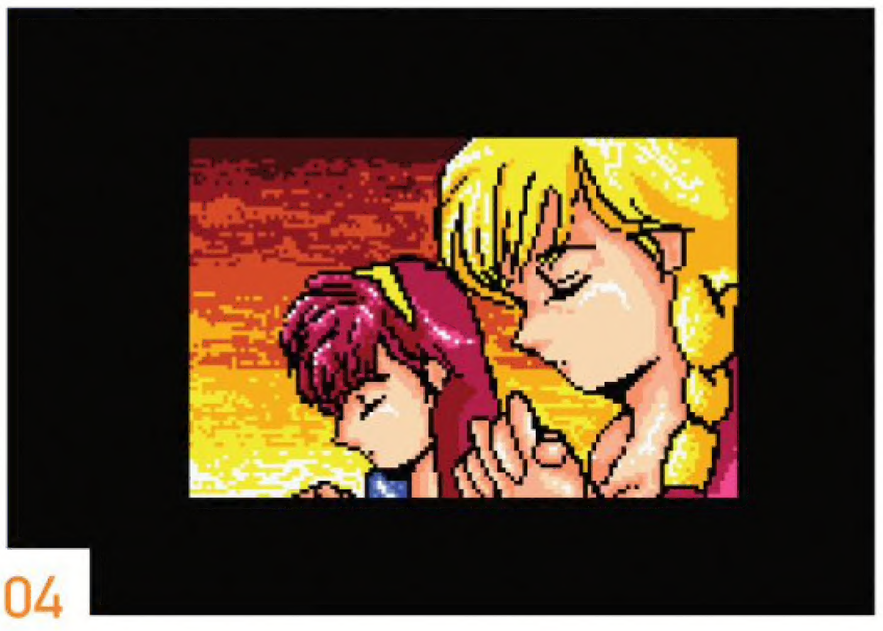


02

» Being the caring souls that they are, the sisters check on each other's injuries. Luckily, the whole ordeal hasn't left the sisters too smashed up. It's a miracle, really – psychic powers notwithstanding, they aren't exactly in battle attire.

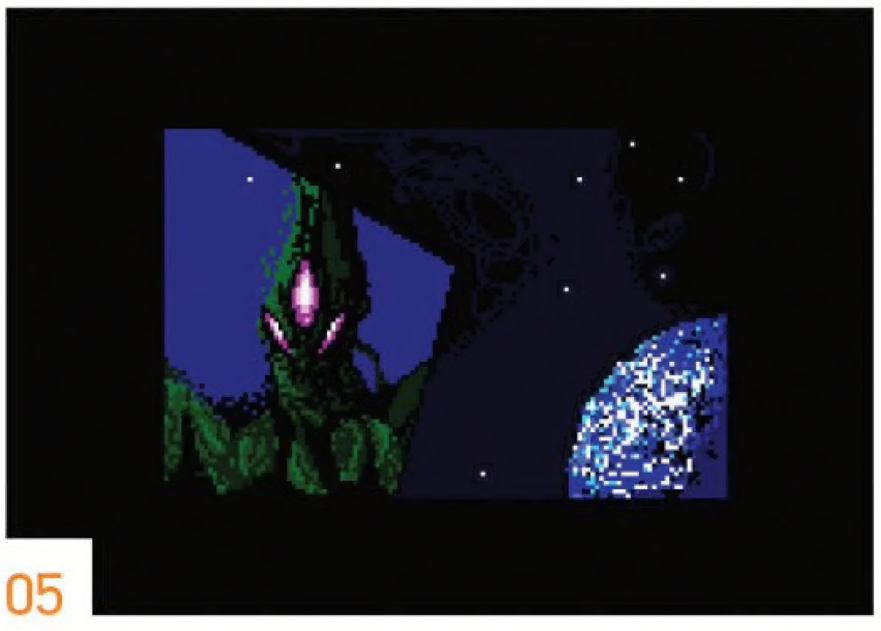
03

» As mandated by the Fortuitous Timing Act 1992, a shooting star then passes by the victorious sisters. What could this possibly mean? Oh, it's time for the girls to make a wish, obviously. How could we have been so foolish?



04

» However, the ladies know all too well that you're not supposed to wish aloud, and keep their desires hidden from the gaming world. As such, we're left to imagine what they might want – could it be world peace, universal psychic awakening, or something else? And so we zoom out to reveal...



05

» Knavik watching from space?! Come on, that's a terrible wish! Don't endanger the planet again just so you can get a sequel! Not only is it not going to happen, we've seen what you look like on the Master System – you'd do better wishing for a competent artist to handle that version.

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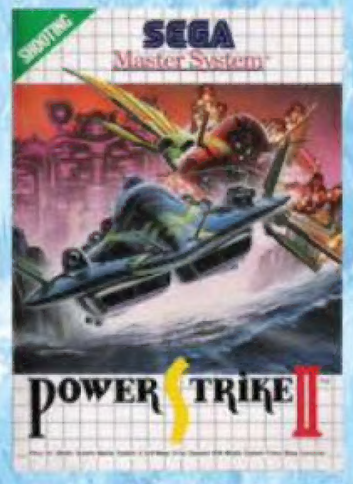

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